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Presidential Documents

Title 3—

The President

Proclamation 10727 of April 10, 2024

Black Maternal Health Week, 2024

By the President of the United States of America

A Proclamation

During Black Maternal Health Week, we recommit to ending the maternal health crisis that is taking the lives of far too many of our Nation's mothers.

Women in America are dying at a higher rate from pregnancy-related causes than women in any other developed nation. Black women face even more risk and are three times more likely to die from pregnancy-related causes than white women. That is in no small part because of a long history of systemic racism and bias. Studies show that when Black women suffer from severe injuries or pregnancy complications or simply ask for assistance, they are often dismissed or ignored in the health care settings that are supposed to care for them. People of color—including expecting mothers—also bear the brunt of environmental injustices like air and water pollution, which worsen health outcomes. Too often, Black mothers lack access to safe and secure housing, affordable transportation, and affordable, healthy food. This is unjust and unacceptable.

That is why my Administration has worked to address this crisis from the very beginning. Vice President Kamala Harris came into office as a key leader on maternal health and continues to fight for improved maternal health outcomes, elevating the issue nationally and convening experts and activists to find solutions. My Administration's first piece of historic legislation—the American Rescue Plan—gave States the option to provide a full year of postpartum coverage to women on Medicaid, increasing it from just 60 days previously. Now, 45 States, Washington, D.C., and the United States Virgin Islands provide a full year of this critical care. We also made coverage under the Affordable Care Act more affordable, saving millions of families an average of $800 per year on health insurance premiums.

My Administration also released the Blueprint for Addressing the Maternal Health Crisis, which outlines actions the Federal Government will take to combat maternal mortality and improve maternal health. To start, we created a new ''Birthing-Friendly'' hospital designation that highlights hospitals and health systems that offer high-quality maternal care—ensuring that expecting mothers know where to go to get the help they need. To find out which facilities are ''Birthing-Friendly,'' go to medicare.gov/care-compare/.

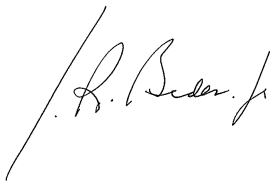
Mental health care is health care—it is so important that women have access to it throughout pregnancy and beyond. My Administration launched the Maternal Mental Health Hotline so that the one in five women in America who experience maternal mental health conditions like depression, anxiety, or substance use disorder can get the support they need. New and expecting mothers can call 1–833–TLC–MAMA—a confidential, 24-hour, toll-free number—to connect with professional counselors. Tens of thousands of women have already taken advantage of this valuable hotline, and we know that being able to access support in times of need literally saves lives. Additionally, we are supporting and expanding maternal mental health screening programs, including for postpartum depression. We are partnering with community-based organizations to help pregnant women access services that treat substance use disorder and support victims of domestic violence.

My Administration is working to grow and diversify the maternal health workforce to better serve expecting mothers by helping health care providers hire and train physicians, certified midwives, doulas, and community health workers. I also signed legislation to ensure employers make reasonable accommodations for pregnant and nursing mothers, who deserve job security and to have their workplace rights respected by expanding the use of break time and access to private spaces for millions of nursing parents. I also remain committed to addressing the long-standing inequities that Black communities have faced and that continue to damage the health and wellness of Black mothers. For example, we have been working to end discrimination in housing, make public transit more accessible to everyone no matter where they live, expand access to healthy and affordable food, and tackle dangerous environmental injustices that take the biggest toll on families from communities of color.

There is still so much to do to ensure safety and dignity in pregnancy and childbirth. This week, we extend our gratitude to all the maternal health care workers, who are on the frontlines of this work. Together, I know that we can make America the best country in the world to have a baby.

NOW, THEREFORE, I, JOSEPH R. BIDEN JR., President of the United States of America, by virtue of the authority vested in me by the Constitution and the laws of the United States, do hereby proclaim April 11 through April 17, 2024, as Black Maternal Health Week. I call upon all Americans to raise awareness of the state of Black maternal health in the United States by understanding the consequences of institutional racism; recognizing the scope of this problem and the need for urgent solutions; amplifying the voices and experiences of Black women, families, and communities; and committing to building a world in which Black women do not have to fear for their safety, well-being, dignity, or lives before, during, and after pregnancy.

IN WITNESS WHEREOF, I have hereunto set my hand this tenth day of April, in the year of our Lord two thousand twenty-four, and of the Independence of the United States of America the two hundred and forty-eighth.



[FR Doc. 2024–08063
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Rules and Regulations

Federal Register
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This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents.

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

24 CFR Part 201

[Docket No. FR–6207–C–03]

RIN 2502–AJ52

Indexing Methodology for Title I Manufactured Home Loan Limits; Correction

AGENCY: Office of the Assistant Secretary for Housing—Federal Housing Commissioner, Department of Housing and Urban Development (HUD).

ACTION: Correcting amendment.

SUMMARY: The Department of the Housing and Urban Development (HUD) is correcting a final rule entitled, ''Indexing Methodology for Title 1 Manufactured Home Loan Limits'' that published in the **Federal Register** on February 28, 2024.

DATES: Effective April 15, 2024.

FOR FURTHER INFORMATION CONTACT: With respect to this technical correction, contact Aaron Santa Anna, Associate General Counsel for Legislation and Regulations, Department of Housing and Urban Development, 451 7th Street SW, Room 10238, Washington, DC 20410; telephone number 202–708–1793 (this is not a toll-free number). HUD welcomes and is prepared to receive calls from individuals who are deaf or hard of hearing, as well as individuals with speech or communication disabilities. To learn more about how to make an accessible telephone call, please visit *https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs.*

SUPPLEMENTARY INFORMATION: On February 28, 2024 (89 FR 14582) (FR Doc. 2024–04138), HUD published a final rule that amends the maximum loan limits for manufactured home loans insured under Title I of the National Housing Act and required regulations to implement future indexing of the loan limit amounts for manufactured homes originated under the Manufactured Home Loan program.

In reviewing the February 28, 2024, final rule, HUD identified inadvertent errors in amendatory instruction 3. This document corrects this error.

List of Subjects in 24 CFR Part 201

Claims, Health facilities, Historic preservation, Home improvement, Loan programs—housing and community development, Manufactured homes, Mortgage insurance, Reporting and recordkeeping requirements.

Accordingly, 24 CFR part 201 is corrected by making the following correcting amendments:

PART 201—TITLE I PROPERTY IMPROVEMENT AND MANUFACTURED HOME LOANS

■ 1. The authority for 24 CFR part 201 continues to read as follows:

Authority: 12 U.S.C. 1703; 15 U.S.C. 1639c; 42 U.S.C. 3535(d).

■ 2. Amend § 201.10 by adding paragraphs (d)(1)(i) through (vii) and (d)(2)(i) and (ii) to read as follows:

§ 201.10 Loan amounts.

* * * * *

(d) * * *

(1) * * *

(i) 130 percent of the sum of the wholesale (base) prices of the home and any itemized options and the charge for freight, as detailed in the manufacturer's invoice;

(ii) The charge for any sales taxes to be paid by the dealer, as detailed in the manufacturer's invoice;

(iii) The actual dealer's cost of transportation to the homesite, set-up and anchoring, including the rental of wheels and axles (if not included in the freight charge);

(iv) The actual dealer's cost of purchasing and installing a central air conditioning system or heat pump, if not installed by the manufacturer;

(v) The appraised value of the developed manufactured home lot (as determined by a HUD-approved appraisal, including on-site water and utility connections, sanitary facilities, site improvements and landscaping) or the purchase price, whichever is less;

(vi) The actual dealer's cost of appurtenances to the home such as a permanent foundation, garage, carport or patio; and

(vii) Any applicable charges authorized at § 201.25(b).

(2) * * *

(i) 95 percent of the total appraised value of the home, the lot, and any appurtenances (as determined by a HUD-approved appraisal), plus 95 percent of any applicable charges authorized at § 201.25(b); or

(ii) 95 percent of the purchase price of the home, the lot, and any appurtenances.

* * * * *

Department of Housing and Urban Development.

Aaron Santa Anna,

Associate General Counsel, Office of Legislation and Regulations.

[FR Doc. 2024–07880 Filed 4–12–24; 8:45 am]

BILLING CODE 4210–67–P

Proposed Rules

Federal Register
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This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF THE TREASURY

Office of the Comptroller of the Currency

12 CFR Part 5

[Docket ID OCC–2023–0017]

RIN 1557–AF24

Business Combinations Under the Bank Merger Act; Extension of Comment Period

AGENCY: Office of the Comptroller of the Currency (OCC), Treasury.

ACTION: Notice of proposed rulemaking (NPR); Extension of comment period.

SUMMARY: This action extends the comment period for the NPR titled ''Business Combinations under the Bank Merger Act'' that was published on February 14, 2024. In that document, the OCC proposed to increase the transparency of the standards that apply to the agency's review of business combinations involving national banks and Federal savings associations. The OCC is extending the comment period closing date to allow interested persons additional time to analyze the proposal and prepare their comments.

DATES: The comment period for the NPR published on February 14, 2024, (89 FR 10010) is extended. Comments must be received on or before June 15, 2024.

ADDRESSES: Commenters are encouraged to submit comments through the Federal eRulemaking Portal. Please use the title ''Business Combinations under the Bank Merger Act'' to facilitate the organization and distribution of the comments. You may submit comments by any of the following methods:

• *Federal eRulemaking Portal—''Regulations.gov'':*

Go to *https://regulations.gov/.* Enter ''Docket ID OCC–2023–0017'' in the Search Box and click ''Search.'' Public comments can be submitted via the ''Comment'' box below the displayed document information or by clicking on the document title and then clicking the ''Comment'' box on the top-left side of the screen. For help with submitting effective comments, please click on ''Commenter's Checklist.'' For assistance with the *Regulations.gov* site, please call 1–866–498–2945 (toll free) Monday–Friday, 9 a.m.–5 p.m. ET, or email *regulationshelpdesk@gsa.gov.*

• *Mail:* Chief Counsel's Office, Attention: Comment Processing, Office of the Comptroller of the Currency, 400 7th Street SW, Suite 3E–218, Washington, DC 20219.

• *Hand Delivery/Courier:* 400 7th Street SW, Suite 3E–218, Washington, DC 20219.

Instructions: You must include ''OCC'' as the agency name and ''Docket ID OCC–2023–0017'' in your comment. In general, the OCC will enter all comments received into the docket and publish the comments on the *Regulations.gov* website without change, including any business or personal information provided such as name and address information, email addresses, or phone numbers. Comments received, including attachments and other supporting materials, are part of the public record and subject to public disclosure. Do not include any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure.

You may review comments and other related materials that pertain to this action by any of the following methods:

• *Viewing Comments Electronically—Regulations.gov:*

Go to *https://regulations.gov/.* Enter ''Docket ID OCC–2023–0017'' in the Search box and click ''Search''. Click on the ''Dockets'' tab and then the document's title. After clicking the document's title, click the ''Browse All Comments'' tab. Comments can be viewed and filtered by clicking on the ''Sort By'' drop-down on the right side of the screen or the ''Refine Comments Results'' options on the left side of the screen. Supporting materials can be viewed by clicking on the ''Browse Documents'' tab. Click on the ''Sort By'' drop-down on the right side of the screen or the ''Refine Results'' options on the left side of the screen checking the ''Supporting & Related Material'' checkbox. For assistance with the *Regulations.gov* site, please call 1–866–498–2945 (toll free) Monday–Friday, 9 a.m.–5 p.m. ET, or email *regulationshelpdesk@gsa.gov.*

The docket may be viewed after the close of the comment period in the same manner as during the comment period.

FOR FURTHER INFORMATION CONTACT: Valerie Song, Acting Associate Chief Counsel, Christopher Crawford, Special Counsel, Elizabeth Small, Counsel, Chief Counsel's Office 202–649–5490; or Yoo Jin Na, Director for Licensing Activities 202–649–6260, Office of the Comptroller of the Currency, 400 7th Street SW, Washington, DC 20219. If you are deaf, hard of hearing, or have a speech disability, please dial 7–1–1 to access telecommunications relay services.

SUPPLEMENTARY INFORMATION: The NPR titled ''Business Combinations under the Bank Merger Act'' was published in the **Federal Register** on February 14, 2024, (89 FR 10010). In that NPR, the OCC proposed to increase the transparency of the standards that apply to the agency's review of business combinations involving national banks and Federal savings associations. In particular, the proposed rule would amend the procedures and would add, as an appendix, a policy statement that summarizes the principles the OCC uses when it reviews proposed bank merger transactions under the Bank Merger Act. The NPR provided for a 60-day comment period, which would have closed on April 15, 2024. The OCC has received a request to extend the comment period. The OCC has determined that an extension of the comment period to June 15, 2024, is appropriate. An extension of the comment period will provide additional opportunity for interested persons to consider the proposal and prepare comments. Therefore, the OCC is extending the end of the comment period for the proposal from April 15, 2024, to June 15, 2024.

Michael J. Hsu,

Acting Comptroller of the Currency.

[FR Doc. 2024–07876 Filed 4–12–24; 8:45 am]

BILLING CODE 4810–33–P

DEPARTMENT OF THE TREASURY

Office of Investment Security

31 CFR Parts 800 and 802

[Docket ID TREAS–DO–2024–0005]

RIN 1505–AC85

Amendments to Penalty Provisions, Provision of Information, Negotiation of Mitigation Agreements, and Other Procedures Pertaining to Certain Investments in the United States by Foreign Persons and Certain Transactions by Foreign Persons Involving Real Estate in the United States

AGENCY: Office of Investment Security, Department of the Treasury.

ACTION: Proposed rule.

SUMMARY: This proposed rule would modify certain provisions in the regulations of the Committee on Foreign Investment in the United States (CFIUS) pertaining to penalties for violations of statutory or regulatory provisions or agreements, conditions, or orders issued pursuant thereto; negotiation of mitigation agreements; requests for information by CFIUS; and certain other procedures.

DATES: Written comments must be received by May 15, 2024.

ADDRESSES: Written comments may be submitted through one of two methods:

- *Electronic Submission:* Comments may be submitted electronically through the Federal government eRulemaking portal at *https://www.regulations.gov.*

Electronic submission of comments allows the commenter maximum time to prepare and submit a comment, ensures timely receipt, and enables the Treasury Department to make the comments available to the public.

- *Mail:* Send to U.S. Department of the Treasury, Attention: Meena R. Sharma, Director, Office of Investment Security Policy and International Relations, 1500 Pennsylvania Avenue NW, Washington, DC 20220.

We encourage comments to be submitted via *https://www.regulations.gov.* Please submit comments only and include your name and company name (if any) and cite ''Amendments to Penalty Provisions, Provision of Information, Negotiation of Mitigation Agreements, and Other Procedures Pertaining to Certain Investments in the United States by Foreign Persons and Certain Transactions by Foreign Persons Involving Real Estate in the United States'' in all correspondence. In general, the Treasury Department will post all comments to *https://www.regulations.gov* without change, including any business or personal information provided, such as names, addresses, email addresses, or telephone numbers. All comments received, including attachments and other supporting material, will be part of the public record and subject to public disclosure. You should only submit information that you wish to make publicly available.

FOR FURTHER INFORMATION CONTACT: Meena R. Sharma, Director, Office of Investment Security Policy and International Relations at U.S. Department of the Treasury, 1500 Pennsylvania Avenue NW, Washington, DC 20220; telephone: (202) 622–3425; email: *CFIUS.Regulations@treasury.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

The regulations at parts 800 and 802 to title 31 of the Code of Federal Regulations (part 800 and part 802, respectively) implement the provisions of section 721 of the Defense Production Act of 1950, as amended, which is codified at 50 U.S.C. 4565 (section 721) and which establishes the authorities of the Committee on Foreign Investment in the United States (CFIUS or the Committee). Section 721 authorizes the President or his designee (*i.e.,* CFIUS) to review mergers, acquisitions, and takeovers by or with any foreign person that could result in foreign control of any U.S. business, certain noncontrolling investments by foreign persons in a subset of U.S. businesses, as well as certain real estate transactions involving foreign persons. When in the course of its review CFIUS identifies a national security risk that arises as a result of a transaction within its jurisdiction (referred to in the regulations as a ''covered transaction'' or, in appropriate cases, a ''covered real estate transaction''), it is authorized to negotiate and enter into agreements with the transaction parties or impose conditions on the transaction parties to mitigate the risk, and it is authorized to enforce those agreements and conditions. This proposed rule includes several amendments to enhance the Committee's identification and resolution of national security risks as well as CFIUS actions in response to violations.

Among other things, the regulations at parts 800 and 802 include provisions that govern CFIUS's requests for information from transaction parties and other persons and their responses to those requests. For example, where CFIUS is aware of a transaction that the parties have not notified or declared to CFIUS, the Committee may request information to determine whether the transaction is a covered transaction. To help CFIUS mitigate risks to U.S. national security and ensure compliance with section 721 and its implementing regulations, this proposed rule sets forth amendments that would expand the categories of information the Committee may request from transaction parties and others. The proposed rule would also enhance the Committee's ability to communicate with parties in other contexts to include requirements to provide information for monitoring compliance with applicable obligations and determining whether a violation of such obligations has occurred.

The proposed rule also includes provisions pertaining to the negotiation of agreements to mitigate national security risk. Section 721(*l*)(3) authorizes the Committee, or a lead agency on behalf of the Committee, to negotiate and enter into an agreement with a party to a covered transaction in order to mitigate any national security risk that arises as a result of the covered transaction. The current regulations contain no provision establishing a time frame within which parties must respond to a Committee proposal or revision of terms to mitigate identified national security risks, and the Committee often exchanges multiple drafts with transaction parties during negotiation of a mitigation agreement. This proposed rule would include a provision ordinarily requiring transaction parties to respond to mitigation agreement drafts within a specified number of days.

A final subject addressed in this proposed rule is the maximum penalty amount that CFIUS may impose on a party for violating section 721 or the implementing regulations, including agreements entered into and conditions and orders imposed pursuant thereto, and the availability of such penalties outside the context of a declaration or notice. The regulations provide for penalties to be imposed in the following situations: (a) submitting a declaration or notice with a material misstatement or omission, or making a false certification; (b) failing to submit a timely declaration in the certain circumstances in which submission is mandatory; and (c) violating a material provision of a mitigation agreement, material condition imposed, or order issued. In each case, the amount of the penalty imposed is based on the nature of the violation. Currently, violations can result in a civil monetary penalty not to exceed $250,000 per violation, or, in certain instances, the greater of

$250,000 or the value of the transaction. This rule would amend the regulations by increasing the maximum penalty amount for situations where it is appropriate, allow the Committee to impose penalties for material misstatements or omissions in certain information submitted to the Committee outside of the submission of a declaration or notice, and extend the time frames related to a petition for reconsideration of a penalty.

II. Discussion of the Rule

A. Requesting Information and Requiring a Response for Transactions for Which No Notice or Declaration Was Submitted, for Compliance Monitoring, and for Determining Whether a Violation of Applicable Obligations Has Occurred

Section 721(b)(1)(H) directs the Committee to establish a process to identify covered transactions for which no notice or declaration has been submitted to the Committee (each such transaction referred to hereafter as a ''non-notified transaction''). A different provision of the Defense Production Act of 1950 (section 705), which applies to the Defense Production Act in its entirety, entitles the President ''by regulation, subpoena, or otherwise, to obtain such information from . . . any person as may be necessary or appropriate, in his discretion, to the enforcement or administration of [the Defense Production Act of 1950] and the regulations or orders issued thereunder.'' Section 705 further requires the President to ''issue regulations insuring [sic] that the authority of [subsection (a) of section 705] will be utilized only after the scope and purpose of the investigation, inspection, or inquiry to be made have been defined by competent authority, and it is assured that no adequate and authoritative data are available from any Federal or other responsible agency.''

In furtherance of the direction in section 721(b)(1)(H) and in accordance with the authority in section 705, the regulations at sections 800.501(b) and 802.501(b) provide that the Staff Chairperson, acting on the recommendation of the Committee, may request the parties to a non-notified transaction to provide to the Committee information necessary to determine whether the transaction is a ''covered transaction'' or a ''covered real estate transaction.'' Sections 800.801(a) and 802.801(a) of the regulations address parties' obligations to respond to such requests as well as certain other requests for information.

While the foregoing provisions contemplate requests related to a transaction's potential status as ''covered'' (*i.e.,* subject to the jurisdiction of the Committee), they do not specifically address other types of information requests. For example, they do not expressly address requests for information that would enable the Committee to determine whether a transaction meets the criteria for a mandatory declaration under section 800.401, nor do they expressly address requests for information that would enable the Committee to determine whether a transaction may raise national security considerations. The proposed rule would amend sections 800.501(b) and 802.501(b) by expressly providing that the Staff Chairperson, acting on the recommendation of the Committee, may request information from transaction parties and other persons related to whether a transaction may raise national security considerations and, in the case of 800.501(b), information as to whether a transaction meets the criteria for a mandatory declaration under section 800.401. The proposed rule would make corresponding amendments to sections 800.801 and 802.801, requiring transaction parties and other persons to respond to such requests for information. As required by section 705, these amendments would define the scope and purpose of the investigation, inspection, or inquiry to be made by CFIUS so as to allow CFIUS to obtain relevant information.

Gathering information of the kind contemplated by the proposed amendments would allow the Committee to prioritize transactions that parties were required to submit under section 800.401 or that, in its view, otherwise warrant formal review. When the Committee is able to engage in preliminary fact-finding relevant to potential national security considerations prior to receiving a formal notice, the information it receives can inform the decision of whether and when to request the submission of a notice. In the event the Committee does request that the transaction parties file a notice, the Committee encourages the parties to submit the notice promptly so that the Committee can undertake its national security review. In the absence of a filing, CFIUS will consider all available options to protect national security, including initiating a review based on an agency notice as provided for in section 800.501(c). For the avoidance of doubt, the Committee does not intend to use its authority to obtain information related to risk as a substitute for a review or an investigation, but rather for the purpose of preventing unnecessary filings and increasing efficiency in connection with filings for transactions that may present an extant risk, benefitting both the transaction parties and national security. A similar efficiency would be gained by being able to request and require the submission of information that would enable the Committee to determine whether a non-notified transaction was one that should have been notified pursuant to the provision on mandatory declarations in section 800.401 of the regulations.

The proposed rule would further amend sections 800.801(a) and 802.801(a) to require parties to provide information to the Committee upon request in two other circumstances: (1) when the Committee seeks information to monitor compliance with or enforce the terms of a mitigation agreement, order, or condition, and (2) when it seeks information to determine whether the transaction parties had made a material misstatement or omitted material information during the course of a previously concluded review or investigation (including a review or investigation that ended with rejection of the parties' notice). The Committee currently requests information in both circumstances, but the regulations do not expressly obligate parties to respond. Under the proposed amendments, parties would be obligated to respond to such requests, failing which the Committee may seek to compel responses through issuance of a subpoena, as provided for in section 705.

Finally, the last sentence of sections 800.801(a) and 802.801(a) of the regulations states that ''[i]f deemed *necessary* by the Committee, information may be obtained from parties to a transaction or other persons through subpoena or otherwise . . . '' (emphasis added). The proposed rule would amend this provision to state that if deemed *appropriate* by the Committee, the Staff Chairperson may issue a subpoena to obtain information. Requiring the Committee to determine the appropriateness of a subpoena, rather than the necessity, is in alignment with the criteria of section 705, which states that the subpoena authority may be used only after the scope and purpose have been defined by competent authority and assurance has been obtained that no adequate and authoritative data are available from any Federal or other responsible agency. The Department of the Treasury expects that this change, and the explicit assignment

of this function to the Staff Chairperson, will enhance operational efficiency.

B. Time Frame for Responding to Proposed Mitigation Terms

In order for the Committee to complete an investigation of a transaction within the time prescribed by statute (*i.e.,* 45 days), it is incumbent upon parties to respond to Committee proposals of terms to mitigate identified national security risks in a timely manner, where relevant. However, parts 800 and 802 currently do not require transaction parties to respond within a specific time frame. By contrast, the regulations require parties to respond to follow-up information requested by the Staff Chairperson in connection with a declaration or notice generally within two or three business days of the request, and this greatly facilitates the Committee's ability to complete its work within the statutory time frames. The absence of such a requirement in connection with proposed mitigation terms can sometimes result in a protracted process where parties may take longer than is reasonable to respond to the Committee's proposed terms. This is particularly the case with regard to reviews of closed transactions, in which timing is critical for the Committee when it has identified an extant risk to national security, but parties may be less motivated to respond promptly given the absence of an impending closing date. In some cases, parties' delayed responses impede the Committee's ability to fulfill its statutory obligation to complete an investigation in 45 days and may result in parties opting to withdraw and refile their notice, restarting the statutory clock, in order to allow sufficient time to reach agreement on mitigation terms. The proposed rule would amend the regulations to specify a three business day period for substantive party responses to proposed mitigation terms (both initial and subsequent proposals or revisions), unless the parties request a longer time frame and the Staff Chairperson grants that request in writing. The Committee expects a substantive response to consist of acceptance of the terms, a counterproposal, or a detailed statement of reasons that the party or parties cannot comply with the proposed terms, which may also include a counterproposal. The regulations as amended by this proposal would be similar to the time frame in which parties are required to respond to follow-up information requests under sections 800.504(a)(4) and 802.504(a)(4).

The Committee anticipates that parties will seek extensions in certain instances including but not limited to initial mitigation proposals and in instances where the proposed risk mitigation is complex and additional time is needed to consult with the transaction parties. The Staff Chairperson may grant reasonable extension requests on a case-by-case basis, as appropriate and taking into account views of the Committee and factors such as the statutory time remaining for the case and whether the transaction has been filed before closing. The proposed rule would further provide that if the parties fail to respond within the time frame specified, the Committee, acting through the Staff Chairperson, may reject the notice, which mirrors the current practice for missed deadlines in responding to requests for follow-up information for a case in review or investigation. *See* 31 CFR 800.504(a)(4) and 31 CFR 802.504(a)(4).

C. Civil Monetary Penalties

Sections 800.901(a) and 802.901(a) of the regulations set the penalty amount for the submission of a declaration or notice with a material misstatement or omission or the making of a false certification at a maximum of $250,000 per violation. Section 800.901(b) sets the penalty for failure to comply with the requirements in section 800.401 pertaining to ''mandatory declarations'' at a maximum of $250,000 or the value of the transaction, whichever is greater, per violation. (There is no counterpart to the mandatory declaration provision in part 802, pertaining to real estate transactions.) Sections 800.901(c) and 802.901(b) set the penalty for violations of material provisions of mitigation agreements, material conditions imposed by the Committee, or orders issued by the Committee at a maximum of $250,000 or the value of the transaction, whichever is greater, per violation. The current maximum penalty amounts provided for in sections 800.901 and 802.901 are not specified in statute and were developed over 15 years ago. This proposed rule would increase the *maximum* penalty amount to $5,000,000 per violation under sections 800.901(a) and 802.901(a); the greater of $5,000,000 or the value of the transaction per violation under section 800.901(b); and the greater of $5,000,000 or the value of the transaction (or, as discussed below, the value of the party's interest in the U.S. business at the time of the violation or time of the transaction) per violation under sections 800.901(c) and 802.901(b). The Committee anticipates that the relevant value of the transaction or interest would be determined through, for example, audited financial statements or other industry standard methods of valuation. These changes would apply to violations that occur on or after the effective date of the final rule making the amendments with respect to sections 800.901(a) and (b) and 802.901(a). With respect to sections 800.901(c) and 802.901(b), the changes would apply to mitigation agreements entered into, conditions imposed, and orders issued on or after the effective date of the final rule making the amendments.

The Committee assesses that the current penalty maximum of $250,000 (or the greater of $250,000 or the value of the transaction) may not sufficiently deter or penalize certain violations. For context, from 2013 to 2022, the median value of covered transactions filed with CFIUS pursuant to a joint voluntary notice was $170 million, with numerous transactions valued in the billions. For covered transaction declarations filed from 2018 (when declarations became an available format for submission) to 2022, the median value was over $38 million. Furthermore, under the definition of ''transaction'' in sections 800.249 and 802.237, covered transactions involving businesses with valuations in the billions of dollars or with substantial liquidity might still be purported to be valued at zero dollars. This circumstance is due in part to the various forms a ''transaction'' may take under sections 800.249 and 802.237, which include an acquisition, or takeover including the acquisition of an ownership interest, the acquisition of a voting interest, a merger consolidation, or the formation of a joint venture; a long-term lease or concession arrangement; an investment; or the conversion of contingent equity interest. If a transaction has a low value (or a valuation of zero dollars), then the value of the transaction becomes irrelevant for penalty purposes, and the maximum penalty becomes $250,000 per violation, which the Committee has determined may be an insufficient deterrent or penalty. A higher maximum penalty stated as an absolute dollar amount is therefore needed. As is the case under the current regulations, the maximum would not necessarily be imposed, but may be appropriate depending on the facts and circumstances including any aggravating or mitigating factors as described in the Committee's Enforcement and Penalty Guidelines (*see* 87 FR 66220) available on the CFIUS web page of the Department of the Treasury's website.

In the case of sections 800.901(c) and 802.901(b) (pertaining to violations of mitigation agreements or conditions),

the proposed rule would further allow for the maximum penalty to be determined by reference to a person's interest in a U.S. business at the time of the violation or the transaction (which, in certain cases, could be greater than the value of the transaction). Thus, the *maximum* penalty for a violation of material provisions of mitigation agreements, material conditions imposed by the Committee, or orders issued by the Committee would be the greatest, per violation, of (i) $5,000,000, (ii) the value of the violating party's interest in the U.S. business (or covered real estate) at the time of the transaction, (iii) the value of the violating party's interest in the U.S. business (or covered real estate) at the time of the violation or the most proximate time to the violation for which assessing such value is practicable, or (iv) the value of the transaction. This range of measurements for the maximum penalty would provide an additional deterrent or penalty in the case of certain transactions valued at less than $5,000,000.

Separately, the proposed rule would expand the list of circumstances in which a penalty may be imposed under sections 800.901(a) and 802.901(a) respectively. Currently, the provision applies to material misstatements or omissions in a declaration or notice or false certifications. Under the proposed amendment, CFIUS penalties also would apply to material misstatements or omissions in contexts outside of declarations and notices—in particular, responses to the Committee's requests for information related to non-notified transactions, certain responses to the Committee's requests for information related to monitoring or enforcing compliance, and other responses to the Committee's requests for information, such as for agency notices, as described in sections 800.901(a)(2) and 802.901(a)(2). Penalties of this nature are not intended to apply to every material misstatement or omission in a communication between parties and the Committee related to monitoring compliance with an agreement, condition, or order entered into pursuant to section 721 and these regulations. (In any event, there are criminal penalties for making false statements to the government under 18 U.S.C. 1001.) Pursuant to sections 800.901(a)(2) and 802.901(a)(2), the Committee will notify parties in writing when parties' response to a particular communication may be subject to a penalty under section 721 and these regulations due to a material misstatement or omission. The Committee anticipates such communications to include those relevant to requests for information related to non-notified transactions, failure to file a mandatory declaration, and compliance with, or enforcement, modification, or termination of a mitigation agreement, condition, or order imposed. The majority of the Committee's communications with transaction parties subject to a mitigation agreement or condition will not be subject to section 800.901(a)(2) or 802.901(a)(2).

For the avoidance of doubt, while the amendments provided for in the proposed rule pertain to the *maximum* penalty that may be imposed for certain violations, they would not affect the Committee's discretion to determine the appropriate penalty in individual cases, similar to other Federal enforcement regimes. In exercising this discretion, the Committee will continue to take into account the specific facts and circumstances of the violation and relevant aggravating and mitigating factors as identified in the Committee's Enforcement and Penalty Guidelines (*see* 87 FR 66220) available on the CFIUS web page of the Department of the Treasury's website.

Under current regulations, upon receiving notice of a penalty to be imposed, the subject person may submit a petition within 15 business days of receipt of such notice, subject to an extension through written agreement with the Committee. Similarly, the Committee has 15 business days to assess the petition and issue a final penalty determination. The proposed rule would extend both time frames to 20 business days. The Committee routinely grants extensions for penalty petitions, and the Committee's experience is that extending both time frames will facilitate the review of the penalty to be imposed. Consistent with the current regulations, persons subject to a penalty may continue to request extensions for submitting a petition for reconsideration. The Staff Chairperson may also extend the time frames due to compelling circumstances.

III. Rulemaking Requirements

Executive Order 12866

This rule is not subject to the general requirements of Executive Order 12866, as amended, which covers review of regulations by the Office of Information and Regulatory Affairs in the Office of Management and Budget (OMB), because it relates to a foreign affairs function of the United States, pursuant to section 3(d)(2) of that order. In addition, this rule is not subject to review under section 6(b) of Executive Order 12866 pursuant to section 1(d) of the June 9, 2023, Memorandum of Agreement between the Treasury Department and OMB, which states that CFIUS regulations are not subject to OMB's standard centralized review process under Executive Order 12866.

Paperwork Reduction Act

The collection of information contained in this rule has been previously submitted to the Office of Management and Budget (OMB) for review in accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3507(d)), and approved under OMB Control Number 1505–0121. An agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a valid OMB Control Number.

Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*) generally requires an agency to prepare a regulatory flexibility analysis, unless the agency certifies that the rule will not, once implemented, have a significant economic impact on a substantial number of small entities. The RFA applies whenever an agency is required to publish a general notice of proposed rulemaking under section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 553), or any other law. As set forth below, because regulations issued pursuant to the Defense Production Act of 1950, as amended (the Defense Production Act of 1950), such as these regulations, are not subject to the rulemaking requirements of the APA or other law requiring the publication of a general notice of proposed rulemaking, the RFA does not apply.

The proposed rule makes amendments to the regulations implementing section 721 of the Defense Production Act of 1950. Section 709(a) of the Defense Production Act of 1950 provides that the regulations issued under it are not subject to the rulemaking requirements of the APA. Section 709(b)(1) instead provides that any regulation issued under the Defense Production Act of 1950 be published in the **Federal Register** and opportunity for public comment be provided for not less than 30 days. Section 709(b)(3) of the Defense Production Act of 1950 also provides that all comments received during the public comment period be considered and the publication of the final regulation contain written responses to such comments. Consistent with the plain text of the Defense Production Act of 1950, legislative history confirms that Congress intended

that regulations under the Defense Production Act of 1950 be exempt from the notice and comment provisions of the APA and instead provided that the agency include a statement that interested parties were consulted in the formulation of the final regulation. *See* H.R. Conf. Rep. No. 102–1028, at 42 (1992) and H.R. Rep. No. 102–208 pt. 1, at 28 (1991). The limited public participation procedures described in the Defense Production Act of 1950 do not require a general notice of proposed rulemaking as set forth in the RFA. Further, the mechanisms for publication and public participation are sufficiently different to distinguish the Defense Production Act of 1950's procedures from a rule that requires a general notice of proposed rulemaking. In providing the President with authority to suspend or prohibit the acquisition, merger, or takeover of, or certain other investments in, a U.S. business by a foreign person, and certain real estate transactions involving foreign persons, if such a transaction would threaten to impair the national security of the United States, Congress could not have contemplated that regulations implementing such authority would be subject to RFA analysis. For these reasons, the RFA does not apply to these regulations.

Notwithstanding the foregoing, available data do not suggest that the proposed rule, if implemented, would have a significant economic impact on a substantial number of small entities. The proposed rule would modify certain provisions pertaining to penalties for violations, negotiation of mitigation agreements, requests for information by CFIUS, and certain other procedures. The proposed rule would not impose any new filing requirements on U.S. businesses, including small businesses, that receive foreign investment subject to CFIUS's jurisdiction.

The proposed rule expands the categories of information the Committee may request from transaction parties and others in connection with transactions that have not been notified or declared to include whether a transaction meets the criteria for a mandatory declaration and information that would enable the Committee to determine whether a transaction may raise national security considerations. This proposed change would not have a significant economic impact on a substantial number of small entities for two reasons. First, the instances in which the Committee requests this information are limited and, on average, occur less than one hundred times in a year. Additionally, the volume of overall non-notified transactions put forward to the Committee for consideration may decrease as CFIUS works through its consideration of transactions that pre-date the Committee's current, increased level of resources. Second, even if some of these transactions may involve U.S. businesses that qualify as small entities, the Department of the Treasury does not anticipate that expanding information requests for non-notified transactions will have a significant impact on the burden hours for a party response. In instances of mandatory filing requirements, transaction parties should be conducting this analysis regardless of whether the Department of the Treasury reaches out.

With regard to information requests for the purposes of monitoring compliance, the proposed rule would not create any new reporting requirements. Rather, the rule would clarify that parties are obligated under the regulations to provide information pertaining to the monitoring of a mitigation agreement, condition, or order and may be penalized for a material misstatement or omission in specified circumstances. Under the current regulations, CFIUS can penalize parties for submitting a declaration or notice with a material misstatement or omission. The amendment put forth is consistent with penalties already authorized under the current regulations.

As discussed above, the proposed rule would include a provision ordinarily requiring transaction parties to respond to national security risk mitigation proposals within three business days. The Committee anticipates that parties would seek extensions in certain instances and the Committee may grant reasonable extension requests on a case-by-case basis, as appropriate. In recent years, the volume of transactions before the Committee has been below 500 annually; only a portion of these are subject to mitigation, and of those, many do not involve small entities. Thus, this change will not have a significant economic impact on a substantial number of small entities.

The proposed rule would increase the civil monetary penalty maximum from $250,000 to $5,000,000 for certain violations and would expand the scope of circumstances in which a penalty may be imposed. The maximum penalty for a violation of material provisions of mitigation agreements, material conditions imposed by the Committee, or orders issued by the Committee would be the greatest, per violation, of (i) $5,000,000, (ii) the value of the violating party's interest in the U.S. business (or covered real estate) at the time of the transaction, (iii) the value of the violating party's interest in the U.S. business (or covered real estate) at the time of the violation, or (iv) the value of the transaction. In assessing the penalty amount, as noted above, the Committee has discretion to determine the appropriate penalty in individual cases which in many instances may be lower than the maximum allowed. In exercising this discretion, the Committee will continue to take into account the specific facts and circumstances of the violation including relevant aggravating and mitigating factors. Given the approach to determining the monetary penalty and the limited number of enforcement actions as compared to the number of transactions reviewed by the Committee each year, this proposed change will not have a significant economic impact on a substantial number of small entities.

While the Department of the Treasury believes that the proposed rule likely would not have a ''significant economic impact on a substantial number of small entities'' (5 U.S.C. 605(b)), the Department of the Treasury invites comments on the potential impacts of this rule on small entities.

List of Subjects

31 CFR Part 800

Foreign investments in the U.S., Investment companies, Investments, Penalties, Reporting and recordkeeping requirements.

31 CFR Part 802

Foreign investments in the U.S., Investment companies, Investments, Land sales, National defense, Penalties, Public lands, Real property acquisition, Reporting and recordkeeping requirements.

For the reasons set forth in the preamble, the Department of the Treasury proposes to amend 31 CFR parts 800 and 802 as follows:

PART 800—REGULATIONS PERTAINING TO CERTAIN INVESTMENTS IN THE UNITED STATES BY FOREIGN PERSONS

■ 1. The authority citation for part 800 continues to read as follows:

Authority: 50 U.S.C. 4565; E.O. 11858, as amended, 73 FR 4677.

■ 2. Amend § 800.501 by revising paragraph (b) to read as follows:

§ 800.501 Procedures for notices.

* * * * *

(b)(1) If the Committee determines that a transaction for which no voluntary notice or declaration has been submitted under this part, and with

respect to which the Committee has not informed the parties in writing that the Committee has concluded all action under section 721, may be a covered transaction and may raise national security considerations, the Staff Chairperson, acting on the recommendation of the Committee, may request the parties to the transaction or other persons to provide to the Committee information necessary to determine whether the transaction is a covered transaction, whether the transaction may raise national security considerations, or, as appropriate, whether the transaction is a transaction for which a submission is or was required under § 800.401.

(2) If the Committee determines that a transaction referred to under paragraph (b)(1) of this section is a covered transaction and may raise national security considerations, the Staff Chairperson, acting on the recommendation of the Committee, may request the parties to file a notice of such covered transaction under paragraph (a) of this section.

* * * * *

■ 3. Amend § 800.504 by:
■ a. In paragraph (a)(3), removing the period at the end of the section and adding a semicolon in its place;
■ b. In paragraph (a)(4), removing ''or'' at the end of the paragraph;
■ c. In paragraph (a)(5), removing the period at the end of the paragraph and adding ''; or'' in its place; and
■ d. Adding paragraph (a)(6).

The addition reads as follows:

§ 800.504 Deferral, rejection, or disposition of certain voluntary notices.

(a) * * *

(6) Reject any voluntary notice at any time after the notice has been accepted, and so inform the parties promptly in writing, if the Committee has proposed risk mitigation terms, including revisions to such terms, to the party or parties that submitted the notice and the party or parties have failed to substantively respond to such terms within three business days of the proposal, or within a longer time frame if the parties so request in writing and the Staff Chairperson grants that request in writing.

* * * * *

■ 4. Amend § 800.801 by revising paragraph (a) to read as follows:

§ 800.801 Obligation of parties or other persons to provide information.

(a) This paragraph (a) sets forth requirements for parties to a transaction or other persons to provide information to the Staff Chairperson or requesting lead agency in the circumstances specified in paragraphs (a)(1) through (6) of this section.

(1) Parties to a transaction that is notified or declared under subpart D or E of this part shall provide information to the Staff Chairperson that will enable the Committee to conduct a full assessment, review, and/or investigation of the transaction.

(2) For a transaction for which no voluntary notice or declaration has been submitted and for which the Staff Chairperson has requested information as provided for in § 800.501(b), parties to the transaction or other persons shall provide information to the Staff Chairperson that will enable the Committee to determine:

(i) Whether the transaction is a covered transaction;

(ii) Whether the transaction may raise national security considerations; or

(iii) As appropriate, whether the transaction is a transaction for which a submission is or was required under § 800.401.

(3) Independent of any obligations under an agreement, condition, or order authorized under section 721(*l*), parties shall provide information to the Staff Chairperson or the requesting lead agency so as to enable the Committee to assess compliance with section 721 and the regulations in this part or to monitor compliance with, enforce or modify the terms of, or decide to terminate any agreement, condition, or order.

(4) Any person that has submitted information to the Committee shall respond to requests from the Staff Chairperson for information to enable the Committee to determine whether the person made any material misstatement or omitted material information from any such submission.

(5) Parties to a transaction that have filed information with the Committee shall promptly advise the Staff Chairperson of any material changes to such information.

(6) If deemed appropriate by the Committee, the Staff Chairperson may obtain information from parties to a transaction or other persons through subpoena or otherwise, under the Defense Production Act, as amended (50 U.S.C. 4555(a)).

* * * * *

■ 5. Amend § 800.901 by:
■ a. Revising paragraph (a);
■ b. In paragraph (b), removing ''$250,000'' and adding in its place ''$5,000,000''; and
■ c. Revising paragraphs (c) and (f).

The revisions read as follows:

§ 800.901 Penalties and damages.

(a)(1) Any person who submits a declaration or notice with a material misstatement or omission or makes a false certification under § 800.404, § 800.405, or § 800.502 may be liable to the United States for a civil penalty not to exceed $5,000,000 per violation.

(2) Any person who, in response to a request from the Staff Chairperson or a lead agency, submits to the Committee any information pursuant to § 800.801(a)(2), (3), or (4) or (c) with a material misstatement or omission may be liable to the United States for a civil penalty not to exceed $5,000,000 per violation. This paragraph (a)(2) shall apply only with respect to responses to requests that were made in writing, specified a time frame for response, and indicated the applicability of this paragraph (a).

(3) The amount of the penalty imposed for a violation as provided for in this paragraph (a) shall be based on the nature of the violation.

* * * * *

(c)(1) Any person who, after December 22, 2008, violates, intentionally or through gross negligence, a material provision of a mitigation agreement entered into before October 11, 2018, with, a material condition imposed before October 11, 2018, by, or an order issued before October 11, 2018, by, the United States under section 721(*l*) may be liable to the United States for a civil penalty not to exceed $250,000 per violation or the value of the transaction, whichever is greater. For clarification, under the previous sentence, whichever penalty amount is greater may be imposed per violation, and the amount of the penalty imposed for a violation shall be based on the nature of the violation.

(2) Any person who violates a material provision of a mitigation agreement entered into on or after October 11, 2018, and before [EFFECTIVE DATE OF FINAL RULE], with, a material condition imposed on or after October 11, 2018, and before [EFFECTIVE DATE OF FINAL RULE], by, or an order issued on or after October 11, 2018, and before [EFFECTIVE DATE OF FINAL RULE], by, the United States under section 721(*l*) may be liable to the United States for a civil penalty per violation not to exceed $250,000 or the value of the transaction, whichever is greater. For clarification, under the previous sentence, whichever penalty amount is greater may be imposed per violation, and the amount of the penalty imposed for a violation shall be based on the nature of the violation.

(3)(i) Any person who violates a material provision of a mitigation agreement entered into on or after

[EFFECTIVE DATE OF FINAL RULE], with, a material condition imposed on or after [EFFECTIVE DATE OF FINAL RULE], by, or an order issued on or after [EFFECTIVE DATE OF FINAL RULE], by, the United States under section 721(*l*) may be liable to the United States for a civil penalty per violation not to exceed the greatest of:

(A) $5,000,000;

(B) The value of the person's interest in the U.S. business (or, as applicable, the parent of the U.S. business) at the time of the transaction;

(C) The value of the person's interest in the U.S. business (or, as applicable, the parent of the U.S. business) at the time of the violation in question or the most proximate time to the violation for which assessing such value is practicable; or

(D) The value of the transaction filed with the Committee.

(ii) For clarification, under paragraphs (c)(3)(i)(A) through (D) of this section, whichever penalty amount is greatest may be imposed per violation, and the amount of the penalty imposed for a violation shall be based on the nature of the violation.

* * * * *

(f) Upon receiving notice of a penalty to be imposed under paragraphs (a) through (c) of this section, the subject person may, within 20 business days of receipt of such notice, submit a petition for reconsideration to the Staff Chairperson, including a defense, justification, or explanation for the conduct to be penalized. The Committee will review the petition and issue any final penalty determination within 20 business days of receipt of the petition. The Staff Chairperson and the subject person may extend either such period through written agreement or, where there is a compelling circumstance and it is deemed appropriate by the Committee, the Staff Chairperson may extend either period by notifying the subject person in writing of the extended time frame. The Committee and the subject person may reach an agreement on an appropriate remedy at any time before the Committee issues any final penalty determination.

* * * * *

PART 802—REGULATIONS PERTAINING TO CERTAIN TRANSACTIONS BY FOREIGN PERSONS INVOLVING REAL ESTATE IN THE UNITED STATES

■ 6. The authority citation for part 802 continues to read as follows:

Authority: 50 U.S.C. 4565; E.O. 11858, as amended, 73 FR 4677.

■ 7. Amend § 802.501 by revising paragraph (b) to read as follows:

§ 802.501 Procedures for notices.

* * * * *

(b)(1) If the Committee determines that a transaction for which no voluntary notice or declaration has been submitted under this part, and with respect to which the Committee has not informed the parties in writing that the Committee has concluded all action under section 721, may be a covered real estate transaction and may raise national security considerations, the Staff Chairperson, acting on the recommendation of the Committee, may request the parties to the transaction or other persons to provide to the Committee information necessary to determine whether the transaction is a covered real estate transaction or whether the transaction may raise national security considerations.

(2) If the Committee determines that a transaction referred to under paragraph (b)(1) of this section is a covered real estate transaction and may raise national security considerations, the Staff Chairperson, acting on the recommendation of the Committee, may request the parties to file a notice of such covered real estate transaction under paragraph (a) of this section.

* * * * *

■ 8. Amend § 802.504 by:

■ a. In paragraph (a)(3), removing the period at the end of the section and adding a semicolon in its place;

■ b. In paragraph (a)(4), removing ''or'' at the end of the paragraph;

■ c. In paragraph (a)(5), removing the period and adding ''; or'' in its place; and

■ d. Adding paragraph (a)(6).

The addition reads as follows:

§ 802.504 Deferral, rejection, or disposition of certain voluntary notices.

(a) * * *

(6) Reject any voluntary notice at any time after the notice has been accepted, and so inform the parties promptly in writing, if the Committee has proposed risk mitigation terms, including revisions to such terms, to the party or parties that submitted the notice and the party or parties have failed to substantively respond to such terms within three business days of the proposal, or within a longer time frame if the parties so request in writing and the Staff Chairperson grants that request in writing.

* * * * *

■ 9. Amend § 802.801 by revising the section heading and paragraph (a) to read as follows:

§ 802.801 Obligation of parties or other persons to provide information.

(a) This paragraph (a) sets forth requirements for parties to a transaction or other persons to provide information to the Staff Chairperson or requesting lead agency in the circumstances specified in paragraphs (a)(1) through (6) of this section.

(1) Parties to a transaction that is notified or declared under subpart D or E of this part shall provide information to the Staff Chairperson that will enable the Committee to conduct a full assessment, review, and/or investigation of the transaction.

(2) For a transaction for which no voluntary notice or declaration has been submitted and for which the Staff Chairperson has requested information as provided for in § 802.501(b), parties to the transaction or other persons shall provide information to the Staff Chairperson that will enable the Committee to determine whether the transaction is a covered real estate transaction or whether the transaction may raise national security considerations.

(3) Independent of any obligations under an agreement, condition, or order authorized under section 721(*l*), parties shall provide information to the Staff Chairperson or the requesting lead agency so as to enable the Committee to assess compliance with section 721 and the regulations in this part or to monitor compliance with, enforce or modify the terms of, or decide to terminate any agreement, condition, or order.

(4) Any person that has submitted information to the Committee shall respond to requests from the Staff Chairperson for information to enable the Committee to determine whether the party made any material misstatement or omitted material information from any such submission.

(5) Parties to a transaction that have filed information with the Committee shall promptly advise the Staff Chairperson of any material changes to such information.

(6) If deemed appropriate by the Committee, the Staff Chairperson may obtain information from parties to a transaction or other persons through subpoena or otherwise, under the Defense Production Act, as amended (50 U.S.C. 4555(a)).

* * * * *

■ 10. Amend § 802.901 by revising paragraphs (a), (b), and (e) to read as follows:

§ 802.901 Penalties and damages.

(a)(1) Any person who submits a declaration or notice with a material misstatement or omission or makes a

false certification under § 802.402, § 802.403, or § 802.502 may be liable to the United States for a civil penalty not to exceed $5,000,000 per violation.

(2) Any person who, in response to a request from the Staff Chairperson or a lead agency, submits to the Committee any information pursuant to § 802.801(a)(2), (3), or (4) or (c), with a material misstatement or omission may be liable to the United States for a civil penalty not to exceed $5,000,000 per violation. This paragraph (a)(2) shall apply only with respect to responses to requests that were made in writing, specified a time frame for response, and indicated the applicability of this paragraph (a).

(3) The amount of the penalty imposed for a violation as provided for in this paragraph (a) shall be based on the nature of the violation.

(b)(1) Any person who violates a material provision of a mitigation agreement entered into on or after February 13, 2020, and before [EFFECTIVE DATE OF FINAL RULE], with, a material condition imposed on or after February 13, 2020, and before [EFFECTIVE DATE OF FINAL RULE], by, or an order issued on or after February 13, 2020, and before [EFFECTIVE DATE OF FINAL RULE], by, the United States under section 721(*l*) may be liable to the United States for a civil penalty per violation not to exceed $250,000 or the value of the transaction, whichever is greater. For clarification, under the previous sentence, whichever penalty amount is greater may be imposed per violation, and the amount of the penalty imposed for a violation shall be based on the nature of the violation.

(2)(i) Any person who violates a material provision of a mitigation agreement entered into on or after [EFFECTIVE DATE OF FINAL RULE], with, a material condition imposed on or after [EFFECTIVE DATE OF FINAL RULE], by, or an order issued on or after [EFFECTIVE DATE OF FINAL RULE], by, the United States under section 721(*l*) may be liable to the United States for a civil penalty per violation not to exceed the greatest of:

(A) $5,000,000;

(B) The value of the person's interest in the covered real estate (or, as applicable, the owner of the covered real estate) at the time of the transaction;

(C) The value of the person's interest in the covered real estate (or, as applicable, the owner of the covered real estate) at the time of the violation in question or the most proximate time to the violation for which assessing such value is practicable; or

(D) The value of the transaction filed with the Committee.

(ii) For clarification, under paragraphs (b)(2)(i)(A) through (D) of this section, whichever penalty amount is greatest may be imposed per violation, and the amount of the penalty imposed for a violation shall be based on the nature of the violation.

* * * * *

(e) Upon receiving notice of a penalty to be imposed under paragraphs (a) through (c) of this section, the subject person may, within 20 business days of receipt of such notice, submit a petition for reconsideration to the Staff Chairperson, including a defense, justification, or explanation for the conduct to be penalized. The Committee will review the petition and issue any final penalty determination within 20 business days of receipt of the petition. The Staff Chairperson and the subject person may extend either such period through written agreement or, where there is a compelling circumstance and if it is deemed appropriate by the Committee, the Staff Chairperson may extend either period by notifying the subject person in writing of the extended time frame. The Committee and the subject person may reach an agreement on an appropriate remedy at any time before the Committee issues any final penalty determination.

* * * * *

Paul M. Rosen,

Assistant Secretary for Investment Security.

[FR Doc. 2024–07693 Filed 4–12–24; 8:45 am]

BILLING CODE 4810–AK–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 50

[EPA–HQ–OAR–2014–0128; FRL–5788–06–OAR]

RIN 2060–AS35

Public Hearing for the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notification of public hearing.

SUMMARY: The Environmental Protection Agency (EPA) is announcing that a virtual public hearing will be held for the proposed action titled, ''Review of the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter'' which is published elsewhere in this **Federal Register**. The hearing will be held on May 8, 2024. Based on the EPA's review of the ecological air quality criteria and the secondary national ambient air quality standards (NAAQS) for oxides of nitrogen (N oxides), oxides of sulfur (SO_X), and particulate matter (PM), the EPA is proposing to revise the existing secondary SO_2 standard. Additionally, the Agency proposes to retain the existing secondary standards for N oxides and PM. The EPA also proposes revisions to data handling requirements for the proposed secondary SO_2 standard.

DATES: The EPA will hold a virtual public hearing on May 8, 2024. (Please refer to the **SUPPLEMENTARY INFORMATION** section for additional information on the public hearing).

FOR FURTHER INFORMATION CONTACT: For information or questions about the public hearing, please contact the public hearing team at *nox-sox-pm-hearing@rti.org* or 919–541–3650. For information or questions regarding the review of the secondary NAAQS for oxides of nitrogen, oxides of sulfur, and particulate matter, please contact Ms. Ginger Tennant, Health and Environmental Impacts Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–04, Research Triangle Park, NC 27711; telephone: (919) 541–4072; email: *tennant.ginger@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. *General Information.* The EPA is reviewing the secondary NAAQS for ecological effects of N oxides, SO_X, and PM as required by section 109 (42 U.S.C. 7409) of the Clean Air Act. The proposed action for which the EPA is holding a public hearing is published elsewhere in this **Federal Register** and is available at *https://www.epa.gov/naaqs/nitrogen-dioxide-no2-and-sulfur-dioxide-so2-secondary-standards-federal-register-notices.* The public hearing will provide interested parties the opportunity to present data, views, or arguments concerning the EPA's proposed decisions in the review of the secondary NAAQS for ecological effects of SO_X, N oxides and PM. Written statements and supporting information submitted during the comment period will be considered with the same weight as any oral comments and supporting information presented at the public hearing.

A. Participation in Virtual Public Hearings: The public hearing will be held via virtual platform on May 8, 2024, and will convene at 11:00 a.m. Eastern Time (ET). The hearing will

conclude at 7:00 p.m. ET or, if there are no additional speakers, 15 minutes after the last pre-registered speaker has testified. The EPA will announce any changes to the schedule or hearing and further details at *https://www.epa.gov/so2-pollution/public-hearing-proposed-decision-so2-no2-and-pm-secondary-national-ambient-air.*

The EPA will begin registering speakers for the hearing upon publication of this document in the **Federal Register**. To register to speak at the virtual hearing, please follow the directions at *https://www.epa.gov/so2-pollution/public-hearing-proposed-decision-so2-no2-and-pm-secondary-national-ambient-air* or contact the public hearing team by email at *nox-sox-pm-hearing@rti.org* or by phone at 919–541–3650. Prior to the hearing, the EPA will post a general agenda for the hearing that will list the pre-registered speakers in approximate order at: *https://www.epa.gov/so2-pollution/public-hearing-proposed-decision-so2-no2-and-pm-secondary-national-ambient-air.* The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule. Each commenter will have up to 5 minutes to provide oral testimony. The EPA encourages commenters to provide the EPA with a copy of their oral testimony by submitting the text of your oral testimony as written comments to the rulemaking docket. The EPA may ask clarifying questions during the oral presentations but will not respond to the presenters at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing. Please note that any updates made to any aspect of the hearing is posted online at *https://www.epa.gov/so2-pollution/public-hearing-proposed-decision-so2-no2-and-pm-secondary-national-ambient-air.* While the EPA expects the hearing to go forward as set forth above, please monitor our website to determine if there are any updates. The EPA does not intend to publish a document in the **Federal Register** announcing updates.

If you require the services of a translator or special accommodations such as audio description, please pre-register for the hearing with the public hearing team and describe your needs by April 22, 2024. The EPA may not be able to arrange accommodations without advance notice.

B. How can I get copies of the proposed action and other related information? The EPA has established a docket under Docket ID No. EPA–HQ–OAR–2014–0128 (available at *https://www.regulations.gov*). Publicly available docket materials are available either electronically through *www.regulations.gov* or in hard copy at the EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Ave. NW, Washington, DC. The Docket Center's hours of operations are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal Holidays). For further information on the EPA Docket Center services and the current status, see: *https://www.epa.gov/dockets.* The EPA has also made available information related to the proposed action on the following website: *https://www.epa.gov/naaqs/nitrogen-dioxide-no2-and-sulfur-dioxide-so2-secondary-air-quality-standards.*

Erika N. Sasser,

Director, Health and Environmental Impacts Division.

[FR Doc. 2024–07960 Filed 4–12–24; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA–R05–OAR–2024–0034; FRL–11775–01–R5]

Air Plan Approval; Ohio; OAC Chapter 3745–17 Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve assorted revisions to Ohio's particulate matter rules that the state requested EPA approve into the Ohio State Implementation Plan (SIP) under the Clean Air Act (CAA). The updates to Ohio's particulate matter rules include revisions to remove provisions for facilities or emissions units that have permanently shut down, update facility names and addresses, and make nonsubstantive revisions to the language of the rules.

DATES: Comments must be received on or before May 15, 2024.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA–R05–OAR–2024–0034 at *https://www.regulations.gov,* or via email to *langman.michael@epa.gov.* For comments submitted at *Regulations.gov*, follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from *Regulations.gov.* For either manner of submission, EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, cloud, or other file sharing system). For additional submission methods, please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section. For the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www2.epa.gov/dockets/commenting-epa-dockets.*

FOR FURTHER INFORMATION CONTACT: Emily Crispell, Control Strategies Section, Air Programs Branch (AR–18J), Environmental Protection Agency, Region 5, 77 West Jackson Boulevard, Chicago, Illinois 60604, (312) 353–8512, *crispell.emily@epa.gov.* The EPA Region 5 office is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays and facility closures due to COVID–19.

SUPPLEMENTARY INFORMATION: Throughout this document whenever ''we,'' ''us,'' or ''our'' is used, we mean EPA.

I. History of Submittal

The Ohio Environmental Protection Agency (Ohio EPA [1]) is subject to requirements to review each of its regulations every five years, to assess whether any updates to the regulations are warranted and for other purposes. Accordingly, Ohio EPA reviewed its regulations in Ohio Administrative Code (OAC) Chapter 3745–17, entitled ''Particulate Matter Standards,'' and adopted various revisions amending and updating these rules. Ohio EPA then requested that EPA approve these revisions into the SIP, in a submittal dated January 18, 2024.

As a result of its review, Ohio EPA concluded that rule revisions were needed to remove provisions that are no longer necessary because the affected

[1] To avoid confusion, this action uses the term ''Ohio EPA'' as shorthand for the Ohio Environmental Protection Agency and the term ''EPA'' as shorthand for the United States Environmental Protection Agency.

facility has permanently shut down. A second set of revisions Ohio EPA made to its rules renumbered emissions units and updated addresses for facilities that have combined operations. A final set of revisions modified the wording of selected text to reflect new semantic preferences, reordered definitions alphabetically, and updated test method, publication and referenced material titles, effective dates, addresses and websites.

Previous revisions to the rules in OAC 3745–17 included providing a category of power plants operating continuous opacity monitoring systems the option to demonstrate compliance with an alternate set of opacity limits. Ohio EPA requested approval of those revisions on June 4, 2003, but EPA proposed to disapprove those revisions on June 27, 2005, at 70 FR 36901. Subsequently, on September 5, 2014, Ohio EPA withdrew its submittal of these revisions. On June 1, 2018, Ohio EPA submitted revisions to OAC 3745–17 and requested that EPA not act on the alternate set of opacity limits. On February 21, 2024, Ohio EPA clarified that the state was not requesting EPA action on these provisions in its January 18, 2024, submittal.

II. Review of Other Rule Revisions

As summarized above, Ohio EPA's revisions to OAC 3745–17 include the removal of provisions that pertain to facilities that have permanently shut down, renumbering of emissions units for facilities that have combined operations, and modification of wording for phrases that Ohio EPA wishes to rephrase. Chapter 3745–17 includes 11 rules, extending from 3745–17–01 to 3745–17–14 but not including the adopted but now rescinded rules numbered 3745–17–02, 3745–17–05, or 3745–17–06. Ohio EPA revised all 11 of these remaining rules. The following discussion reviews each rule revision individually.

3745–17–01 ''Definitions''

The primary revisions to OAC 3745–17–01 include the addition of a section to the introduction explaining that the definitions in 3745–15–01 ''General Provisions on Air Pollution Control'' apply to the rules in chapter 3745–17, the renumbering of the referenced materials section to paragraph AA, the alphabetical reordering of definitions throughout the rule, and updates to publication dates and website URLs of referenced materials. No terms or definitions were added or removed from this section.

3745–17–03 ''Measurement Methods and Procedures''

The primary revisions in this rule are editorial, for example the revision of references to terms defined in 3745–17–01 to reflect the new location of those terms that were reordered, the revision of the introduction paragraph to show the Referenced Materials section is located under paragraph (AA), cleaning up sections 3745–17–03(B)(3), 3745–17–03(B)(4), 3745–17–03(B)(9) and 3745–17–03(B)(10) to renumber or remove references to rules that had been removed in previous rulemakings, and the removal of provisions that apply to facilities or emissions units that have permanently shut down. Additional editorial changes include removal of the use of ''shall'' in some instances, removing pronouns such as ''his/her'' and in instead referring to ''the observer''. EPA finds that these editorial revisions yield an equally acceptable regulation. While Ohio EPA requested approval of most of OAC 3745–17–03, Ohio EPA expressly excluded two elements of OAC 3745–17–03 from this request. One of these elements, in OAC 3745–17–03(B)(1)(b), offers an alternate opacity limit (in brief, authorizing 1.1 percent of nonexempt 6-minute opacity values to exceed 20 percent opacity) for power plants operating continuous opacity monitoring systems. The second, associated element is the phrase in OAC 3745–17–03(B)(1)(a) stating ''Except as provided in paragraph (B)(1)(b) of this rule''. These are provisions that Ohio EPA submitted on June 4, 2003, that EPA proposed to disapprove on June 27, 2005, and that Ohio EPA withdrew from consideration on September 5, 2014. Accordingly, EPA is proposing to act on most of OAC 3745–17–03 but EPA is proposing not to act on subparagraph 3745–17–03(B)(1)(b) and the specified phrase in 3745–17–03(B)(1)(a).

3745–17–04 ''Compliance Time Schedules''

The primary revisions in this rule are the removal of provisions that apply to facilities or emissions units that have permanently shut down and the removal of references to paragraphs that were removed in previous rulemakings. EPA finds that these revisions are approvable.

3745–17–07 ''Control of Visible Particulate Emissions From Stationary Sources''

The primary revisions in this rule include modifications to the introduction paragraph to show the information for referenced materials are located under paragraph (AA), and the removal of references to 3745–17–07(B)(9) and 3745–17–07(B)(10) as those paragraphs were removed in previous rulemakings. EPA finds that these revisions result in an equally protective set of rules and are approvable.

3745–17–08 ''Restriction of Emission of Fugitive Dust''

The primary revisions in this rule are modifications to the terms defined in 3745–17–01 to reflect the new location of those terms that were reordered, changes to the introduction paragraph to show the information for referenced materials is located under paragraph (AA), the removal of references to 3745–17–08(E) and 3745–17–08(F) as those paragraphs had been removed in previous rulemakings, and revising the facility name and address associated with Ohio EPA premise number 0641090010 in 3745–17–08(A)(3)(e) to reflect the facility name change from ''Mingo Junction Steel Works LLC'' to ''JSW Steel USA Ohio'' and the removal of the address for the north plant that has permanently shut down. EPA finds that these revisions are approvable.

3745–17–09 ''Restrictions on Particulate Emissions and Odors From Incinerators''

The primary revisions in this rule are minor and editorial, for example changing the language from ''shall apply'' to ''applies''. EPA finds that these revisions are approvable.

3745–17–10 ''Restrictions on Particulate Emissions From Fuel-Burning Equipment''

Ohio EPA removed provisions that are moot due to the permanent shut down of an affected facility, and Ohio EPA made editorial revisions to remove references to paragraphs that were removed in previous rulemakings. EPA finds that these revisions are approvable.

3745–17–11 ''Restrictions on Particulate Emissions From Industrial Processes''

The primary revisions in this rule are changes to terms defined in 3745–17–01 to reflect the new location of those terms that were reordered, removal of the use of ''shall'' in some instances, and the revision of the facility name associated with Ohio EPA premise number 1318001613 in 3745–17–11(B)(6) to reflect the facility name change from ''ArcelorMittal Cleveland LLC'' to ''Cleveland-Cliffs Cleveland Works LLC''. EPA finds that these revisions are approvable.

3745–17–12 ''Additional Restrictions on Particulate Emissions From Specific Air Contaminant Sources in Cuyahoga County''

Most of the revisions to this rule are to remove provisions that are moot due to the permanent shut down of the affected source. Ohio EPA also updated the names of companies and emissions units in applicable cases. Additional editorial changes include the revision of the introduction paragraph to show the information for referenced materials is located under paragraph (AA). EPA finds that these revisions have no substantive effect on the requirements of the rule and are approvable.

3745–17–13 ''Additional Restrictions on Particulate Emissions From Specific Air Contaminant Sources in Jefferson County''

As with OAC 3745–17–12, the revisions to OAC 3745–17–13 remove the provisions that apply to sources that have permanently shut down and update the names of affected companies where appropriate. EPA finds that these revisions have no substantive effect on the requirements of the rule and are approvable.

3745–17–14 ''Contingency Plan Requirements for Cuyahoga and Jefferson Counties''

The primary revisions to this rule are to remove the provisions that apply to sources that have permanently shut down. Ohio EPA also made editorial revisions similar to those discussed above. EPA finds that these revisions are approvable.

III. What action is EPA taking?

EPA is proposing to approve the revisions to OAC 3745–17 that Ohio EPA submitted on January 18, 2024, with the exception of selected sections of OAC 3745–17–03 as clarified by Ohio EPA on February 21, 2024.

IV. Incorporation by Reference

In this rulemaking, EPA is proposing to include, in a final EPA rule, regulatory text that includes incorporation by reference. In accordance with requirements set forth in 1 CFR 51.5, EPA is proposing to incorporate by reference Ohio EPA rules 3745–17–01, 3745–17–03 [with the exception of the phrase in 3745–17–03(B)(1)(a) reading ''Except as provided in paragraph (B)(1)(b) of this rule'' and 3745–17–03(B)(1)(b)], 3745–17–04, 3745–17–07, 3745–17–08, 3745–17–09, 3745–17–10, 3745–17–11, 3745–17–12, 3745–17–13,and 3745–17–14, effective August 25, 2023, discussed in section II of this preamble. EPA has made, and will continue to make, these documents generally available through *www.regulations.gov* and at the EPA Region 5 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a significant regulatory action subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993), and 14094 (88 FR 21879, April 11, 2023);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it approves a state program;
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001); and
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA.

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian Tribe has demonstrated that a Tribe has jurisdiction. In those areas of Indian country, the rule does not have Tribal implications and will not impose substantial direct costs on Tribal governments or preempt Tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629, February 16, 1994) directs Federal agencies to identify and address ''disproportionately high and adverse human health or environmental effects'' of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. EPA defines environmental justice (EJ) as ''the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.'' EPA further defines the term fair treatment to mean that ''no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies.''

The Ohio EPA did not evaluate environmental justice considerations as part of its SIP submittal; the CAA and applicable implementing regulations neither prohibit nor require such an evaluation. EPA did not perform an EJ analysis and did not consider EJ in this action. Due to the nature of the action being taken here, this action is expected to have a neutral to positive impact on the air quality of the affected area. Consideration of EJ is not required as part of this action, and there is no information in the record inconsistent with the stated goal of E.O. 12898 of achieving environmental justice for people of color, low-income populations, and Indigenous peoples.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Particulate matter, Reporting and recordkeeping requirements.

Dated: March 27, 2024.

Debra Shore,

Regional Administrator, Region 5.

[FR Doc. 2024–07129 Filed 4–12–24; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

49 CFR Parts 191, 192, and 193

[Docket No. PHMSA–2024–0005]

Pipeline Safety: Meeting of the Gas Pipeline Advisory Committee

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), Department of Transportation (DOT).

ACTION: Notice of advisory committee meeting; extension of comment period.

SUMMARY: On February 20, 2024, PHMSA published a **Federal Register** notice titled: ''Pipeline Safety: Meeting of the Gas Pipeline Advisory Committee,'' which provided an opportunity for public comment by April 29, 2024, on the proceedings of the Gas Pipeline Advisory Committee (GPAC) meeting related to the notices of proposed rulemakings (NPRMs) titled ''Gas Pipeline Leak Detection and Repair'' (LDAR) and ''Class Location Change Requirements'' (Class Location). PHMSA received a request to extend the comment period for stakeholders to have more time to provide comments on the topics of discussion. PHMSA is denying the request to extend the comment period for the GPAC proceedings related to the LDAR NPRM, but PHMSA is granting the request to extend the comment period for the GPAC proceedings related to the Class Location NPRM to August 27, 2024.

DATES: The comment period for the proposed rule published February 2024, at 89 FR 12798, is extended. Comments should be received on or before August 27, 2024, for comments on GPAC proceedings related to the Class Location NPRM. The closing date for filing comments is April 29, 2024, for comments on GPAC proceedings related to the LDAR NPRM. Consistent with 49 CFR 190.323, the agency will consider late-filed comments to the extent practicable.

ADDRESSES: You may submit comments identified by the docket number PHMSA–2024–0005 by any of the following methods:

E-Gov Web: https://www.regulations.gov. This site allows the public to enter comments on any **Federal Register** notice issued by any agency. Follow the online instructions for submitting comments.

Mail: Docket Management System: U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building Ground Floor, Room W12–140, Washington, DC 20590–0001.

Hand Delivery: U.S. DOT Docket Management System, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Fax: 1–202–493–2251.

Instructions: Please include the docket number PHMSA–2024–0005 at the beginning of your comments. If you submit your comments by mail, submit two copies. If you wish to receive confirmation that PHMSA has received your comments, include a self-addressed stamped postcard. Internet users may submit comments at *https://www.regulations.gov/.*

Note: Comments are posted without changes or edits to *https://www.regulations.gov,* including any personal information provided. There is a privacy statement published on *https://www.regulations.govhttps://www.regulations.gov.*

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice (DOT/ALL–14 FDMS), that can be reviewed at *www.dot.gov/privacy.*

Confidential Business Information: Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA, 5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this document contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this notice, it is important that you clearly designate the submitted comments as CBI. Pursuant to 49 CFR 190.343, you may ask PHMSA to give confidential treatment to information you give to the agency by taking the following steps: (1) mark each page of the original document submission containing CBI as ''Confidential''; (2) send PHMSA, along with the original document, a second copy of the original document with the CBI deleted; and (3) explain why the information you are submitting is CBI. Submissions containing CBI should be sent to Tewabe Asebe, Office of Pipeline Safety, by phone at 202–366–5523 or by email at *tewabe.asebe@dot.gov.* Any commentary PHMSA receives that is not specifically designated as CBI will be placed in the public docket.

Docket: For access to the docket to read background documents or comments received, go to *https://www.regulations.gov.* Follow the online instructions for accessing the docket. Alternatively, you may review the documents in person at the street address listed above.

FOR FURTHER INFORMATION CONTACT: Tewabe Asebe, Office of Pipeline Safety, by phone at 202–366–5523 or by email at *tewabe.asebe@dot.gov.*

SUPPLEMENTARY INFORMATION:

On February 20, 2024, PHMSA published a **Federal Register** notice (89 FR 12798) announcing its plans to hold a public meeting of the Technical Pipeline Safety Standards Committee, also known as the Gas Pipeline Advisory Committee (GPAC), to complete discussion on the notices of proposed rulemakings (NPRMs) titled ''Gas Pipeline Leak Detection and Repair'' and ''Class Location Change Requirements.'' In the notice, PHMSA announced that the public meeting would be held from March 25, 2024, to March 29, 2024, and specified that comments on the proceedings of the GPAC meeting must be submitted by April 29, 2024.

Following the conclusion of the meeting, PHMSA received a joint comment extension request from the Interstate Natural Gas Association of America, American Fuel and Petrochemical Manufacturers, American Gas Association, American Petroleum Institute, American Public Gas Association, and the GPA Midstream Association (the Associations). The Associations requested an additional 60 days to provide comment on the GPAC proceedings pertaining to the LDAR NPRM, which would change the comment deadline to June 28, 2024. The Associations also requested an additional 120 days to provide comment on the GPAC proceedings pertaining to the Class Location NPRM, changing the comment deadline to August 27, 2024.

PHMSA received comments from public interest and environmental groups opposing the extension of the comment period for GPAC proceedings pertaining to the ''Gas Pipeline Leak Detection and Repair'' NPRM. Noting that the rule is urgently needed to improve safety and reduce methane emissions across the millions of miles of pipelines in the Unites States, and that the Protecting Our Infrastructure of Pipelines and Enhancing Safety Act of 2020 directed PHMSA to finalize advanced leak detection and repair standards by December 2021;

commenters urged PHMSA to swiftly finalize the proposed measures to improve public safety. Extending the comment period for GPAC proceedings pertaining to the Leak Detection and Repair NPRM could further delay PHMSA's finalization of that rule.

PHMSA will extend the comment submission deadline from April 29, 2024, to August 27, 2024, for comments on the GPAC proceedings pertaining to the Class Location NPRM. For comments on the GPAC proceedings pertaining to the Leak Detection and Repair NPRM, the comment submission deadline will remain April 29, 2024. Consistent with 49 CFR 190.323, PHMSA will consider late-filed comments to the extent practicable.

Issued in Washington, DC, on April 10, 2024, under authority delegated in 49 CFR 1.97.

Massoud Tahamtani,

Deputy Associate Administrator for Policy and Programs.

[FR Doc. 2024–07888 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–60–P

Notices

Federal Register
Vol. 89, No. 73
Monday, April 15, 2024

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

AGENCY FOR INTERNATIONAL DEVELOPMENT

Request for Information Regarding the Global AI Research Agenda; Extension of Comment Period

AGENCY: U.S. Agency for International Development.

ACTION: Request for information; extension of comment period.

SUMMARY: On March 13, 2024, the United States Agency for International Development (USAID) published a request for information (RFI) seeking comment on a Global AI Research Agenda being developed on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. The RFI established a April 10, 2024, deadline for the submission of written comments. DOE is extending the comment period to April 24, 2024.

DATES: The comment period for the RFI published on March 13, 2024 (89 FR 18590) (*https://www.federalregister.gov/documents/2024/03/14/2024-05357/global-ai-research-agenda*) is extended. USAID will accept comments responding to this RFI submitted on or before April 24, 2024.

ADDRESSES: Comments may be submitted by any of the following methods:

Sent as an attachment to *gaira_rfi@usaid.gov* in any of the following unlocked formats: HTML; ASCII; Word; RTF; Unicode, or .pdf.

Written comments may be submitted by mail to: USAID, IPI/ITR/T, Rm. 2.12–213, RRB, 1300 Pennsylvania Avenue NW, Washington, DC 20004.

FOR FURTHER INFORMATION CONTACT: For questions about this RFI contact: Craig Jolley, *gaira_rfi@usaid.gov* or 1–202–712–5536.

Accessible Format: USAID will make the RFI available in alternate formats, such as Braille or large print, upon request by persons with disabilities.

SUPPLEMENTARY INFORMATION: On March 13, 2024, the U.S. Agency for International Development (USAID) published a request for information (RFI) in the **Federal Register** (89 FR 18590) (*https://www.federalregister.gov/documents/2024/03/14/2024-05357/global-ai-research-agenda*). USAID issued this RFI to assist in carrying out responsibilities under Executive Order 14110 (*https://www.federalregister.gov/executive-order/14110*) on Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence issued on October 30, 2023. Specifically, the E.O. directs USAID and the State Department to publish a Global AI Research Agenda to guide the objectives and implementation of AI-related research in contexts beyond United States borders.

Authority: Executive Order 14110 of Oct. 30, 2023.

Sabeen V. Dhanani,

Deputy Director, Technology Division, Innovation, Technology & Research Hub (ITR), Bureau for Inclusive Growth, Partnerships, and Innovation.

[FR Doc. 2024–07864 Filed 4–12–24; 8:45 am]

BILLING CODE 6116–01–P

DEPARTMENT OF AGRICULTURE

Forest Service

Solicitation of Nominations for Membership for the Southern Region Recreation Resource Advisory Committee

AGENCY: Forest Service, Agriculture (USDA).

ACTION: Solicitation of nominations for membership.

SUMMARY: The United States Department of Agriculture (Department) is seeking nominations for the Southern Region Recreation Resource Advisory Committee (Southern Region Recreation RAC) pursuant to the authority of the Federal Lands Recreation Enhancement Act and the Federal Advisory Committee Act (FACA), as amended. The Southern Region Recreation RAC will provide recommendations to the Secretary of Agriculture on recreation fees on lands and waters managed by the Forest Service and the Department of the Interior's Bureau of Land Management in the regions covered by each committee. The Southern Region Recreation RAC will be governed by the provisions of FACA. Duration of the Southern Region Recreation RAC is for two years unless renewed by the Secretary.

DATES: Nominations must be submitted via email or postmarked by May 31, 2024.

ADDRESSES: Nominations and resumes may be submitted to the Secretary of Agriculture through the Forest Service via Caroline Mitchell, Southern Region Recreation RAC Coordinator, Ouachita National Forest, P.O. Box 1270, Hot Springs, AR 71902 or via email to *sm.fs.r8_rrac@usda.gov.*

FOR FURTHER INFORMATION CONTACT: Inquiries may be sent to Tiffany Williams, Regional Recreation Fees, Southern Region, USDA Forest Service, 1720 Peachtree Street NW, Atlanta, GA 30309, by phone (404) 576–1024 or via email *sm.fs.r8_rrac@usda.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to Federal Lands Recreation Enhancement Act (Pub. L. 108–447) and the Federal Advisory Committee Act (5 U.S.C. 10), notice is hereby given the Secretary of Agriculture's intent to solicit members. Additional information on the Southern Region Recreation RAC can be found by visiting the committee website at *https://www.fs.usda.gov/main/r8/recreation/racs.*

Southern Region Recreation RAC Membership

The Southern Region Recreation RAC will be comprised of 11 members approved by the Secretary of Agriculture where each will serve a two- or three-year term. Memberships shall include representation from the following interest areas:

1. Five persons who represent:

a. Winter motorized such as snowmobiling;

b. Winter non-motorized such cross-country skiing and snowshoeing;

c. Summer motorized recreation such as motorcycling, boating, and off-highway vehicle driving;

d. Summer nonmotorized recreation such as hiking, horseback riding, mountain biking, canoeing, and rafting; and

e. Hunting and fishing.

2. Three persons who represent:

a. Motorized outfitters and guides;

b. Non-motorized outfitters and guides; and

c. Local environmental groups.

3. Three persons who represent:

a. State tourism official representing the State;

b. A representative of affected Indian tribes; and

c. A representative of affected local government interests.

Membership Nomination Information

The appointment of members to the Southern Region Recreation RAC will be made by the Secretary of Agriculture, or their designee. Any interested person or organization may nominate qualified individuals for membership. Interested candidates may nominate themselves. Individuals who wish to be considered for membership on the committee must submit a nomination with information, including a background disclosure form (Form AD–755; *https://www.usda.gov/sites/default/files/documents/ad-755.pdf*). Nominations should be typed and include the following:

1. If nominating an individual, a brief summary, no more than two pages, explaining the nominee's qualifications to serve on the committee and addressing the membership composition and criteria described above.

2. A resume providing the nominee's background, experience, and educational qualifications.

3. A completed background disclosure form (Form AD–755) signed by the nominee.

4. Letters of endorsement are optional.

Persons with disabilities who require alternative means of communication for program information (Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720–2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877–8339. Additionally, program information may be made available in languages other than English.

USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Equal opportunity practices in accordance with USDA's policies will be followed in all appointments to the committee. To ensure that the recommendations of the committee have taken in account the needs of the diverse groups served by USDA, membership shall include to the extent possible, individuals with demonstrated ability to represent minorities, women, and person with disabilities. USDA is an equal opportunity provider, employer, and lender.

Dated: April 9. 2024.

Cikena Reid,

USDA Committee Management Officer.

[FR Doc. 2024–07897 Filed 4–12–24; 8:45 am]

BILLING CODE 3411–15–P

DEPARTMENT OF AGRICULTURE

Rural Utilities Service

[Docket No. RUS–24–WATER–0008]

60-Day Notice of Proposed Information Collection: RUS-Technical Assistance and Construction for Innovative Regional Wastewater Treatment Solutions (TAC–RWTS) Pilot Grant Program; OMB Control No.: 0572–0157

AGENCY: Rural Utilities Service, USDA.

ACTION: Notice; request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the United States Department of Agriculture (USDA) Rural Utilities Service (RUS or Agency) announces its intention to request a revision of a currently approved information collection and invites comments on this information collection.

DATES: Comments on this notice must be received by June 14, 2024 to be assured of consideration.

ADDRESSES: Comments may be submitted electronically by the Federal eRulemaking Portal, *http://www.regulations.gov*. In the ''Search for dockets and documents on agency actions'' box, enter the docket number ''RUS–24–WATER–0008,'' and click the ''Search'' button. From the search results: click on or locate the document title: ''60-Day Notice of Proposed Information Collection: ''RUS-Technical Assistance and Construction for Innovative Regional Wastewater Treatment Solutions (TAC–RWTS) Pilot Grant Program'' and select the ''Comment'' button. Before inputting comments, commenters may review the ''Commenter's Checklist'' (optional). To submit a comment: Insert comments under the ''Comment'' title, click ''Browse'' to attach files (if available), input email address, select box to opt to receive email confirmation of submission and tracking (optional), select the box ''I'm not a robot,'' and then select ''Submit Comment.''

Information on using *Regulations.gov*, including instructions for accessing documents, submitting comments, and viewing the docket after the close of the comment period, is available through the site's ''FAQ'' link.

All comments will be available for public inspection online at the Federal eRulemaking Portal (*https://www.regulations.gov*).

FOR FURTHER INFORMATION CONTACT: Lisa Day, Rural Development Innovation Center—Regulations Management Division, USDA, 1400 Independence Avenue SW, Room 4227, South Building, Washington, DC 20250–1522. Telephone: (971) 313–4750. Email *Lisa.Day@USDA.GOV*.

SUPPLEMENTARY INFORMATION: The Office of Management and Budget's (OMB) regulation (5 CFR part 1320) implementing provisions of the Paperwork Reduction Act of 1995 (Pub. L. 104–13) requires that interested members of the public and affected agencies have an opportunity to comment on information collection and recordkeeping activities (see 5 CFR 1320.8(d)). This notice identifies the following information collection that RUS is submitting to OMB as an extension to an existing collection with Agency adjustment.

Title: RUS-Technical Assistance and Construction for Innovative Regional Wastewater Treatment Solutions (TAC–RWTS) Pilot Grant Program.

OMB Control Number: 0572–0157.

Expiration Date of Approval: August 31, 2024.

Type of Request: Revision of a currently approved collection.

Estimate of Burden: This collection of information is estimated to average 4.4 hour per response.

Respondents: Not-for-profit institutions; Business or other for profit.

Estimated Number of Respondents: 9.

Estimated Number of Responses per Respondent: 10.77.

Estimated Total Number of Responses: 97.

Estimated Annual Reporting Burden on Respondents: 423 hours.

Estimated Annual Recordkeeping Burden on Respondents: 0 hours.

Estimated Total Annual Burden on Respondents: 423 hours.

Abstract: The TAC–RWTS Grant Pilot Program was authorized by the Further Consolidated Appropriations Act, 2020, for the study and design of innovative treatment solutions of regional wastewater systems for historically impoverished communities that have had difficulty installing traditional wastewater treatment systems due to soil conditions. Qualified regional

consortiums will receive TAC–RWTS grant funds to identify and evaluate economically feasible, innovative regional solutions to wastewater treatment concerns for historically impoverished communities in areas which have had difficulty installing traditional wastewater treatment systems due to soil conditions. Grants are for wastewater-related technical assistance, including such services as feasibility studies, preliminary design assistance and supervision, oversight, or training for the development of an application for financial assistance.

Grantees will be expected to provide the Agency with a detailed report to include the area to be served, the issues with the present method of wastewater discharge, the alternatives and innovative solutions to the wastewater issue, the long-term cost and effect of the solution, the affordability including possible funding sources, potential treatment, staff training needs, and lifecycle cost analysis.

Comments are invited on:

(a) whether the proposed collection of information is necessary for the proper performance of the functions of the Agency, including whether the information will have practical utility.

(b) the accuracy of the Agency's estimate of the burden of the proposed collection of information including the validity of the methodology and assumptions used.

(c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology. All responses to this notice will be summarized and included in the request for OMB approval. All comments will become a matter of public record.

Copies of this information collection can be obtained from Lisa Day, Innovation Center—Regulations Management Division, at (971) 313.4750. Email: *Lisa.Day@USDA.GOV*.

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Laurel Leverrier,

Acting Administrator, Rural Utilities Service.

[FR Doc. 2024–07922 Filed 4–12–24; 8:45 am]

BILLING CODE 3410–15–P

COMMISSION ON CIVIL RIGHTS

Sunshine Act Meeting Notice

AGENCY: United States Commission on Civil Rights.

ACTION: Notice of Commission public business meeting.

DATES: Friday, February 23, 2024, 10 a.m. EST.

ADDRESSES: Meeting to take place virtually and is open to the public via livestream on the Commission's YouTube page: *https://www.youtube.com/user/USCCR/videos.*

FOR FURTHER INFORMATION CONTACT: Angelia Rorison: 202–376–8371; *publicaffairs@usccr.gov.*

SUPPLEMENTARY INFORMATION: In accordance with the Government in Sunshine Act (5 U.S.C. 552b), the Commission on Civil Rights is holding a meeting to discuss the Commission's business for the month. This business meeting is open to the public. Computer assisted real-time transcription (CART) will be provided. The web link to access CART (in English) on Friday, February 23, 2024, is *https://www.streamtext.net/player?event=USCCR.* Please note that CART is text-only translation that occurs in real time during the meeting and is not an exact transcript.

Meeting Agenda

I. Approval of Agenda
II. Business Meeting
A. Presentations by State Advisory Committee Chairs on Released Reports and Memorandum
- Florida
- Puerto Rico
- Virgin Islands

B. Management and Operations
- Staff Director's Report

III. Adjourn Meeting

Dated: April 11, 2024.

Angelia Rorison,

USCCR Media and Communications Director.

[FR Doc. 2024–08031 Filed 4–11–24; 4:15 pm]

BILLING CODE 6335–01–P

DEPARTMENT OF COMMERCE

Census Bureau

National Advisory Committee

AGENCY: Census Bureau, Department of Commerce.

ACTION: Notice of public virtual meeting.

SUMMARY: The Census Bureau is giving notice of a virtual meeting of the National Advisory Committee on Racial, Ethnic and Other Populations (NAC). The Committee will address policy, research, and technical issues relating to a full range of Census Bureau programs and activities, including the decennial census, demographic and economic statistical programs, field operations, and information technology. Last minute changes to the schedule are possible, which could prevent giving advance public notice of schedule adjustments.

DATES: The virtual meeting will be held on:

- Thursday, May 2, 2024, from 10:30 a.m. to 5:30 p.m. ET.

ADDRESSES: Please visit the Census Advisory Committee website at *https://www.census.gov/about/cac/nac/meetings/2024-05-meeting.html,* for the NAC meeting information, including the agenda, and how to view the meeting.

FOR FURTHER INFORMATION CONTACT: Shana Banks, Advisory Committee Branch Chief, Office of Program, Performance and Stakeholder Integration (PPSI), *shana.j.banks@census.gov,* Department of Commerce, Census Bureau, telephone 301–763–3815. For TTY callers, please use the Federal Relay Service at 1–800–877–8339.

SUPPLEMENTARY INFORMATION: The NAC provides technical expertise to address Census Bureau program needs and objectives. The members of the NAC are appointed by the Director of the Census Bureau. The NAC has been established in accordance with the Federal Advisory Committee Act (5 U.S.C. 1001 et seq).

All meetings are open to the public. Public comments will be accepted in written form via email to *shana.j.banks@census.gov,* (subject line ''2024 NAC Spring Virtual Meeting Public Comment''). A brief period will be set aside during the virtual meeting to read public comments received by noon ET, Wednesday, May 1, 2024. All public comments received will be posted to the website listed in the **ADDRESSES** section.

Robert L. Santos, Director, Census Bureau, approved the publication of this notice in the **Federal Register**.

Dated: April 8, 2024.

Shannon Wink,

Program Analyst, Policy Coordination Office, U.S. Census Bureau.

[FR Doc. 2024–07879 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–07–P

DEPARTMENT OF COMMERCE

Census Bureau

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Current Population Survey (CPS) Voting and Registration Supplement

AGENCY: Census Bureau, Commerce.

ACTION: Notice of information collection, request for comment.

SUMMARY: The Department of Commerce, in accordance with the Paperwork Reduction Act (PRA) of 1995, invites the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us assess the impact of our information collection requirements and minimize the public's reporting burden. The purpose of this notice is to allow for 60 days of public comment on the proposed reinstatement without change of the Current Population Survey Voting and Registration Supplement as required by the Paperwork Reduction Act of 1995, prior to the submission of the information collection request (ICR) to OMB for approval.

DATES: To ensure consideration, written comments must be submitted on or before June 14, 2024.

ADDRESSES: Interested persons are invited to submit written comments by email to Kyra Linse, Survey Director, Current Population Surveys via the internet at *dsd.cps@census.gov.* Please reference Current Population Survey (CPS) Basic Demographic Items in the subject line of your comments. You may also submit comments, identified by Docket Number USBC–2024–0006, to the Federal e-Rulemaking Portal: *http://www.regulations.gov.* All comments received are part of the public record. No comments will be posted to *http://www.regulations.gov* for public viewing until after the comment period has closed. Comments will generally be posted without change. All Personally Identifiable Information (for example, name and address) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information. You may submit attachments to electronic comments in Microsoft Word, Excel, or Adobe PDF file formats.

FOR FURTHER INFORMATION CONTACT: Requests for additional information or specific questions related to collection activities should be directed to Kyra Linse, Survey Director, Current Population Surveys via the internet at *dsd.cps@census.gov,* or by phone at 301–763–9280.

SUPPLEMENTARY INFORMATION:

I. Abstract

The Census Bureau plans to request clearance from the Office of Management and Budget (OMB) for the collection of data concerning the Voting and Registration Supplement to be conducted in conjunction with the November 2024 CPS. The Census Bureau sponsors the supplement questions, which have been previously collected in November biennially since 1964. The current clearance expired July 31, 2023.

This survey has provided statistical information for tracking historical trends of voter and nonvoter characteristics in each Presidential or Congressional election since 1964. The data collected from the November supplement relates demographic characteristics (age, sex, race, education, occupation, and income) to voting and nonvoting behavior. The November CPS supplement is the only federal survey that provides a comprehensive set of voter and nonvoter characteristics. Federal, state, and local election officials use these data to formulate policies relating to the voting and registration process. Academic researchers, political party committees, think tanks, and other private organizations also use the voting and registration data.

II. Method of Collection

The voting and registration information will be collected by both personal visit and telephone interviews in conjunction with the November CPS interviewing. All interviews are conducted using computer-assisted interviewing.

III. Data

OMB Control Number: 0607–0466.

Form Number(s): There are no forms. All interviews are conducted using computers.

Type of Review: Regular submission, Request for Reinstatement, without Change of a previously approved collection for which approval has expired.

Affected Public: Households.

Estimated Number of Respondents: 44,000.

Estimated Time per Response: 1.5 minutes.

Estimated Total Annual Burden Hours: 1100.

Estimated Total Annual Cost to Public: There is no cost to the respondents other than their time (This is not the cost of respondents' time, but the indirect costs respondents may incur for such things as purchases of specialized software or hardware needed to report, or expenditures for accounting or records maintenance services required specifically by the collection.)

Respondent's Obligation: Voluntary.

Legal Authority: Title 13, U.S.C. 8(b), 141, and 182.

IV. Request for Comments

We are soliciting public comments to permit the Department/Bureau to: (a) Evaluate whether the proposed information collection is necessary for the proper functions of the Department, including whether the information will have practical utility; (b) Evaluate the accuracy of our estimate of the time and cost burden for this proposed collection, including the validity of the methodology and assumptions used; (c) Evaluate ways to enhance the quality, utility, and clarity of the information to be collected; and (d) Minimize the reporting burden on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Comments that you submit in response to this notice are a matter of public record. We will include, or summarize, each comment in our request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Sheleen Dumas,

Department PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024–07899 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–07–P

DEPARTMENT OF COMMERCE

Census Bureau

Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations

AGENCY: Census Bureau, U.S. Department of Commerce.

ACTION: Renewal of the Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations.

SUMMARY: The Census Bureau is publishing this notice to announce the renewal of the Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations (NAC or Committee). The purpose of the Committee is to provide advice to the Director of the Census Bureau on the full range of economic, housing, demographic, socioeconomic, linguistic, technological, methodological, geographic, behavioral, and operational variables affecting the cost, accuracy, and implementation of Census Bureau programs and surveys, including the decennial census. This includes the identification of new strategies for improved census operations and survey and data collection methods, including cost efficient ways to increase census participation. Additional information concerning the Committee can be found by visiting the Committee's website at: *https://www.census.gov/about/cac/nac.html.*

FOR FURTHER INFORMATION CONTACT: Shana J. Banks, Advisory Committee Branch Chief, Office of Program, Performance and Stakeholder Integration (PPSI), *shana.j.banks@census.gov,* Department of Commerce, Census Bureau, telephone 301–763–3815. For TTY callers, please use the Federal Relay Service at 1–800–877–8339.

SUPPLEMENTARY INFORMATION:

Background

In accordance with the Federal Advisory Committee Act (FACA), the Secretary of the Department of Commerce (Secretary) renews the NAC. The Secretary has determined that the work of the Committee is in the public interest and relevant to the duties of the Census Bureau. The NAC will operate under the provisions of FACA and will report to the Director of the Census Bureau. The Census Bureau National Advisory Committee on Racial, Ethnic, and Other Populations will advise the Director of the Census Bureau on the full range of Census Bureau programs and activities.

Objectives and Duties

1. The Committee will provide advice and recommendations to the Director of the Census Bureau (Director) on the full range of economic, housing, demographic, socioeconomic, linguistic, technological, methodological, geographic, behavioral, and operational variables affecting the cost, accuracy, and implementation of Census Bureau programs and surveys, including the decennial census.

2. The Committee will provide advice and recommendations on the identification of new strategies for improved census operations, and survey and data collection methods, including cost efficient ways to increase census participation.

3. The Committee will advise on census policies, research and methodology, tests, operations, communications/messaging, and other activities to ascertain needs and best practices to improve Census Bureau programs and surveys.

4. The Committee will provide formal recommendations on working papers, reports, and other documents related to the design and implementation of census programs and surveys.

5. The Committee will provide expertise on the full spectrum of Census Bureau surveys and program and will examine such areas as hidden households, language barriers, students and youth, aging populations, American Indian and Alaska Native tribal consideration, new immigrant populations, populations affected by natural disasters, highly mobile and migrant populations, disabled populations, complex households, poverty, race/ethnicity distribution, privacy and confidentiality, rural populations and businesses, individuals and households with limited access to information and communication technologies, the dynamic nature of new businesses, minority ownership of businesses, as well as other concerns impacting Census Bureau survey design and implemtation.

6. The Committee functions solely as an advisory body under the FACA.

Membership

1. The Committee consists of up to 32 members who will be appointed by and serve at the discretion of the Director.

2. The Committee aims to have a balanced representation among its members, considering such factors as geography, technical expertise, community involvement, and knowledge of census programs and/or activities.

3. The Committee aims to include members from diverse backgrounds, including state, local and tribal governments; academia; research organizations; national and community-based organizations; and the private sector; and, where possible the Census Bureau will also consider the ethnic, racial, and gender diversity and various abilities of the United States population. Individuals will be selected based on their expertise in specific areas as needed by the Census Bureau.

4. Members will serve as Special Government Employees (SGEs) as defined in title 18 of the U.S. Code, section 202. SGEs are appointed for their individual expertise and experience and are subject to conflict of interest laws and regulations, including (but not limited to) the obligation to annually file a New Entrant Confidential Financial Disclosure Report (OGE Form 450) and complete ethics training. Members will be individually advised of the capacity in which they will serve through their appointment letters.

5. Membership is open to persons who are not seated on other Census Bureau stakeholder entities (*i.e.,* State Data Centers, Census Information Centers, Federal State Cooperative on Populations Estimates Program, other Census advisory committees, etc.). No employee of the federal government can serve as a member of the Committee.

6. Members generally will serve an initial three-year term. All members will be evaluated at the conclusion of their initial term with the prospect of renewal, pending Committee needs. Active attendance and participation in meetings and activities (*e.g.,* conference calls and assignments) will be factors considered when determining term renewal or membership continuance. Members may be appointed for a second, three-year term at the discretion of the Director. An individual appointed to any of the other Census Bureau advisory committees may not be reappointed to or serve on the NAC until at least three years after their term on the other committee has concluded.

7. Members will be selected on a standardized basis, in accordance with applicable Department of Commerce guidance.

Miscellaneous

1. Members of the Committee serve without compensation but will, upon request, be allowed travel and per diem expenses as authorized by 5 U.S.C. 5703.

2. The Census Bureau will convene approximately two NAC meetings per year, budget and environmental conditions permitting. Committee meetings are open to the public in accordance with FACA.

3. Members must be able to actively participate in the tasks of the Committee, including, but not limited to, regular meeting attendance, Committee meeting discussant responsibilities, review of materials, as well as participation in conference calls, webinars, working groups, and/or special committee activities.

4. The Department of Commerce is committed to equal opportunity in its advisory committee and seeks diverse Committee membership.

Robert L. Santos, Director, Census Bureau, approved the publication of this notice in the **Federal Register**.

Dated: April 10, 2024.

Shannon Wink,

Program Analyst, Policy Coordination Office, U.S. Census Bureau.

[FR Doc. 2024–07883 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–07–P

DEPARTMENT OF COMMERCE

Foreign-Trade Zones Board

[B–15–2024]

Foreign-Trade Zone (FTZ) 224; Notification of Proposed Production Activity; Jubilant HollisterStier, LLC; (Pharmaceuticals) Spokane, Washington

Jubilant HollisterStier, LLC, submitted a notification of proposed production activity to the FTZ Board (the Board) for its facility in Spokane, Washington within FTZ 224. The notification conforming to the requirements of the Board's regulations (15 CFR 400.22) was received on April 9, 2024.

Pursuant to 15 CFR 400.14(b), FTZ production activity would be limited to the specific foreign-status material(s)/component(s) and specific finished product(s) described in the submitted notification (summarized below) and subsequently authorized by the Board. The benefits that may stem from conducting production activity under FTZ procedures are explained in the background section of the Board's website—accessible via *www.trade.gov/ftz.*

The proposed finished product is cetuximab finished drug product (duty free).

The proposed foreign-status materials/components include cetuximab monoclonal antibody active pharmaceutical ingredient (API) in mixed and unmixed forms (duty free).

Public comment is invited from interested parties. Submissions shall be addressed to the Board's Executive Secretary and sent to: *ftz@trade.gov.* The closing period for their receipt is May 28, 2024.

A copy of the notification will be available for public inspection in the ''Online FTZ Information System'' section of the Board's website.

For further information, contact Diane Finver at *Diane.Finver@trade.gov.*

Dated: April 10, 2024.

Elizabeth Whiteman,

Executive Secretary.

[FR Doc. 2024–07905 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

Initiation of Five-Year (Sunset) Reviews; Correction

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

ACTION: Notice; Correction.

SUMMARY: The U.S. Department of Commerce (Commerce) published in the **Federal Register** of April 1, 2024, in which Commerce announced the initiation of five-year reviews (Sunset Reviews) of the antidumping duty (AD) and countervailing duty (CVD) order(s) and suspended investigation(s). That notice listed an incorrect case number in the ''Initiation of Review'' section.

FOR FURTHER INFORMATION CONTACT: Thomas Martin, AD/CVD Operations, Office IV, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–3936.

SUPPLEMENTARY INFORMATION:

Background

On April 1, 2024, Commerce published in the **Federal Register** a notice of Initiation of Five-Year (Sunset) Reviews. In that notice, Commerce incorrectly listed the Commerce case number ''DOC Case No.'' for Utility Wind Towers (2nd Review) from Vietnam as ''A–552–863'' when it should have listed ''A–552–814.''

Correction

In the **Federal Register** of April 1, 2024, in FR Doc 2024–06793, on page 22374 in the first column, correct the Commerce case number ''DOC Case No.'' found in the ''Initiation of Review'' table to ''A–552–814'' for Utility Wind Towers (2nd Review) from Vietnam.

Notification to Interested Parties

This notice of initiation is being published in accordance with section 751(c) of the Tariff Act of 1930, as amended, and 19 CFR 351.218(c).

Dated: April 9, 2024.

James Maeder,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2024–07858 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[C–570–157]

Aluminum Lithographic Printing Plates From the People's Republic of China: Preliminary Determination of Critical Circumstances, in Part, in the Countervailing Duty Investigation; Correction

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

ACTION: Notice; correction.

SUMMARY: The U.S. Department of Commerce (Commerce) published notice in the **Federal Register** of April 8, 2024, in which Commerce made its preliminary determination of critical circumstances, in part, in the countervailing duty (CVD) investigation of aluminum lithographic printing plates (printing plates) from the People's Republic of China (China) for Fujifilm Printing Plate (China) Co., Ltd. (FFPS) and Shanghai National Ink Co. Ltd. (Shanghai National). This notice listed the incorrect date for U.S. Customs and Border Protection (CBP) to begin the suspension of liquidation for entries of subject merchandise for FFPS and Shanghai National.

FOR FURTHER INFORMATION CONTACT: Ajay Menon, AD/CVD Operations, Office IX, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–0208.

SUPPLEMENTARY INFORMATION:

Background

On April 8, 2024, Commerce published in the **Federal Register** the preliminary determination of critical circumstances, in part, in the CVD investigation of printing plates from China.[1] We incorrectly listed the date for CBP to begin the suspension of liquidation for entries of subject merchandise from FFPS and Shanghai National as December 1, 2023, instead of December 2, 2023, which is 90 days prior to the date of publication of the *Preliminary Determination*.[2]

[1] *See Aluminum Lithographic Printing Plates from the People's Republic of China: Preliminary Determination of Critical Circumstances, in Part, in the Countervailing Duty Investigation,* 89 FR 24433 (April 8, 2024).

[2] *See Aluminum Lithographic Printing Plates from the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination, and Alignment of Final Determination with Final Antidumping Duty Determination,* 89 FR 15134 (March 1, 2024) (*Preliminary Determination*).

Correction

In the **Federal Register** of April 8, 2024, in FR Doc 2024–07346, on page 24435, in the second column, in the section entitled, ''Suspension of Liquidation,'' correct the date for CBP to suspend liquidation of unliquidated entries of subject merchandise from China produced by FFPS and Shanghai National to be December 2, 2023.

Notification to Interested Parties

This notice is issued and published in accordance with sections 703(f) and 777(i)(1) of the Tariff Act of 1930, as amended.

Dated: April 9, 2024.

Ryan Majerus,

Deputy Assistant Secretary for Policy and Negotiations, performing the non-exclusive functions and duties of the Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–07903 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

Rescission of Antidumping and Countervailing Duty Administrative Reviews

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: Based upon the timely withdrawal of all review requests, the Department of Commerce (Commerce) is rescinding the administrative reviews covering the periods of review and the antidumping duty (AD) and countervailing duty (CVD) orders identified in the table below.

DATES: Applicable April 15, 2024.

FOR FURTHER INFORMATION CONTACT: Brenda E. Brown, AD/CVD Operations, Customs Liaison Unit, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230, telephone: (202) 482–4735.

SUPPLEMENTARY INFORMATION:

Background

Based upon timely requests for review, Commerce initiated administrative reviews of certain companies for the periods of review and the AD and CVD orders listed in the table below, pursuant to 19 CFR 351.221(c)(1)(i).[1] All requests for these reviews have been timely withdrawn.[2]

Rescission of Review

Pursuant to 19 CFR 351.213(d)(1), Commerce will rescind an administrative review, in whole or in part, if the parties that requested the review withdraw their review requests within 90 days of the date of publication of the notice of initiation for the requested review. All parties withdrew their requests for the reviews listed in the table below within the 90-day deadline. No other parties requested administrative reviews of these AD/CVD orders for the periods noted in the table. Therefore, in accordance with 19 CFR 351.213(d)(1), Commerce is rescinding, in their entirety, the administrative reviews listed in the table below.

	Period of review
AD Proceedings	
Austria:	
Strontium Chromate, A–433–813	11/1/2022–10/31/2023
France:	
Strontium, Chromate, A–427–830	11/1/2022–10/31/2023
Netherlands:	
Hot-Rolled Steel Flat Product, A–421–813	10/1/2022–9/30/2023
Taiwan:	
Stainless Steel Wire Rod, A–583–828	9/1/2022–8/31/2023
The People's Republic of China:	
Diamond Sawblades and Part Thereof, A–570–900	11/1/2022–10/31/2023
Fresh Garlic, A–570–831	11/1/2022–10/31/2023
The Socialist Republic of Vietnam:	
Seamless Refined Copper Pipe and Tube, A–552–831	8/1/2022–7/31/2023
United Arab Emirates:	
Circular Welded Carbon-Quality Steel Pipe, A–520–807	12/1/2022–11/30/2023
CVD Proceedings	
India:	
Welded Stainless Pressure Pipe, C–533–868	1/1/2022–12/31/2022
Forged Steel Fittings, C–570–068	1/1/2022–12/31/2022

Assessment

Commerce will instruct U.S. Customs and Border Protection (CBP) to assess antidumping and/or countervailing duties on all appropriate entries during the periods of review noted above for each of the listed administrative reviews at rates equal to the cash deposit of estimated antidumping or countervailing duties, as applicable, required at the time of entry, or withdrawal of merchandise from warehouse, for consumption, in accordance with 19 CFR 351.212(c)(1)(i). Commerce intends to issue assessment instructions to CBP no earlier than 35 days after the date of publication of this recission notice in the **Federal Register** for rescinded administrative reviews of AD/CVD orders on countries other than Canada

[1] *See Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 88 FR 62322 (September 11, 2023); *Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 88 FR 78298 (November 15, 2023); *Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 88 FR 84784 (December 6, 2023); *Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 88 FR 90168 (December 29, 2023); and *Initiation of Antidumping and Countervailing Duty Administrative Reviews,* 89 FR 8641(February 8, 2024).

[2] The letters withdrawing the review requests may be found in Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at *https://access.trade.gov.*

and Mexico. For rescinded administrative reviews of AD/CVD orders on Canada or Mexico, Commerce intends to issue assessment instructions to CBP no earlier than 41 days after the date of publication of this recission notice in the **Federal Register**.

Notification to Importers

This notice serves as the only reminder to importers of merchandise subject to AD orders of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties and/or countervailing duties prior to liquidation of the relevant entries during the review period. Failure to comply with this requirement could result in the presumption that reimbursement of antidumping duties and/or countervailing duties occurred and the subsequent assessment of doubled antidumping duties.

Notification Regarding Administrative Protective Order

This notice also serves as the only reminder to parties subject to administrative protective orders (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3), which continues to govern business proprietary information in these segments of these proceedings. Timely written notification of the return or destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

Notification to Interested Parties

This notice is issued and published in accordance with sections 751(a)(1) and 777(i)(1) of the Tariff Act of 1930, as amended, and 19 CFR 351.213(d)(4).

Dated: April 2, 2024.

James Maeder,

Deputy Assistant Secretary for Antidumping and Countervailing Duty Operations.

[FR Doc. 2024–07856 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–533–843]

Certain Lined Paper Products From India: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2021–2022

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The U.S. Department of Commerce (Commerce) determines that ITC Limited made sales of subject merchandise in the United States at prices below normal value (NV), and Navneet Education Ltd. (Navneet) did not, during the period of review (POR) September 1, 2021, through August 31, 2022.

DATES: Applicable April 15, 2024.

FOR FURTHER INFORMATION CONTACT: Samuel Brummitt or Katherine Sliney, AD/CVD Operations, Office III, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–7851 or (202) 482–2437, respectively.

SUPPLEMENTARY INFORMATION:

Background

On October 5, 2023, Commerce published the *Preliminary Results* for this review in the **Federal Register** and invited interested parties to comment on those results.[1] For a summary of the events that occurred since the *Preliminary Results, see* the Issues and Decision Memorandum.[2] Commerce conducted this administrative review in accordance with section 751 of the Tariff Act of 1930, as amended (the Act).

Scope of the Order [3]

The products covered by this *Order* are certain lined paper products from India. For a complete description of the scope, *see* the Issues and Decision Memorandum.

Final Determination of No Shipments

As noted in the *Preliminary Results,* we received no-shipment claims from Dinakar Process Private Limited (Dinakar), JC Stationery (P) Ltd (JC Stationery), and M/s. Bhaskar Paper Products (Bhaskar), and we preliminarily determined that JC Stationery and Bhaskar had no shipments during the POR.[4]

Information on the record regarding U.S. Custom and Border Protection (CBP) entry data showed that Dinakar had suspended entries into the United States.[5] Additionally, CBP reported information that contradicted Dinakar's no-shipment claim.[6] Prior to the *Preliminary Results,* Commerce requested that Dinakar and ITC Limited [7] correct customs entry forms that Dinakar and ITC Limited claim were filed incorrectly.[8] Commerce preliminarily determined that the record did not support a finding of no shipments for Dinakar.[9]

Following the *Preliminary Results,* Commerce again requested that Dinakar and ITC Limited provide information that the entry documentation that the parties claimed incorrectly listed Dinakar as the exporter or manufacturer of entries into the United States during the POR was revised.[10] Dinakar and ITC Limited were unable to demonstrate that the entry documents were revised to remove Dinakar as the exporter of subject entries into the United States during the POR.[11] Accordingly,

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[1] *See Certain Lined Paper Products from India: Preliminary Results of Antidumping Duty Administrative Review; and Preliminary Determination of No Shipments; 2021–2022*, 88 FR 69125 (October 5, 2023) (*Preliminary Results*), and accompanying Preliminary Decision Memorandum (PDM).

[2] *See* Memorandum, ''Decision Memorandum for the Final Results of Antidumping Duty Administrative Review: Certain Lined Paper Products from India; 2021–2022,'' dated concurrently with, and hereby adopted by, this notice (Issues and Decision Memorandum).

[3] *See Notice of Amended Final Determination of Sales at Less Than Fair Value: Certain Lined Paper Products from the People's Republic of China; Notice of Antidumping Duty Orders: Certain Lined Paper Products from India, Indonesia and the People's Republic of China;* and *Notice of Countervailing Duty Orders: Certain Lined Paper Products from India and Indonesia,* 71 FR 56949 (September 28, 2006) (*Order*).

[4] *See Preliminary Results,* 88 FR at 69126.

[5] *See* Commerce's Letter dated April 3, 2023 (ACCESS barcode 4361597–01); *see also* Memorandum, ''Respondent Selection,'' dated February 6, 2023, at Attachment.

[6] *See* Memorandum, ''Release of U.S. Customs and Border Protection Information Relating to December 22, 2022 Entry Document Request,'' dated January 17, 2023.

[7] Commerce noted in the *Preliminary Results* that we initiated this review on ''ITC Limited-Education and Stationery Products Business'' (ITC–ESPB), but record evidence indicates that ITC–ESPB is not a company but is merely a department of ITC Limited. Accordingly, ITC Limited is the entity subject to this review, not ITC–ESPB. There is no additional information on this record or arguments from parties following the *Preliminary Results* that would lead Commerce to reevaluate this determination.

[8] *See* Commerce's Letter dated March 9, 2023 (ACCESS barcode 4351661–01).

[9] *See Preliminary Results,* 88 FR at 69125.

[10] *See* Commerce's Letters, ''Supplemental Questionnaire,'' dated November 3, 2023. (There were letters with identical titles issued separately to Dinakar and to ITC Limited on this date.)

[11] *See* Issues and Decision Memorandum at Comment 2.

Commerce determines that the record does not support a finding of no shipments for Dinakar.

Following the publication of the *Preliminary Results,* we received no comments from interested parties regarding JC Stationery and Bhaskar, nor has any party submitted record evidence which would call our preliminary determinations of no shipments for these two companies into question. Therefore, for the final results, we continue to find that JC Stationery and Bhaskar had no shipments of subject merchandise during the POR. Accordingly, consistent with Commerce's practice, we intend to instruct CBP to liquidate any existing entries of merchandise produced by JC Stationery and Bhaskar, but exported by other parties, at the rate for the intermediate reseller, if available, or at the all-others rate.[12]

Rates for Companies Not Selected for Individual Examination

For the rate for non-selected respondents in an administrative review, generally, Commerce looks to section 735(c)(5) of the Act, which provides instructions for calculating the all-others rate in a market economy investigation. Under section 735(c)(5)(A) of the Act, the all-others rate is normally ''an amount equal to the weighted average of the estimated weighted average dumping margins established for exporters and producers individually investigated, excluding any zero or *de minimis* margins, and any margins determined entirely {on the basis of facts available}.''

In this segment of the proceeding, because the rate calculated for Navneet is zero, we have assigned a dumping margin to the companies not selected for individual review based on the weighted-average dumping margin calculated for ITC Limited.

Analysis of Comments Received

All issues raised by parties in the case and rebuttal briefs are addressed in the Issues and Decision Memorandum. A list of the issues addressed in the Issues and Decision Memorandum is included in the appendix to this notice. The Issues and Decision Memorandum is a public document and is on file electronically via Enforcement and Compliance's Antidumping and Countervailing Duty Centralized Electronic Service System (ACCESS). ACCESS is available to registered users at *https://access.trade.gov.* In addition, a complete version of the Issues and Decision Memorandum can be accessed directly at *https://access.trade/gov/public/FRNoticesListLayout.aspx.*

Changes Since the Preliminary Results

We made no changes to the *Preliminary Results* based on comments from interested parties.

Final Results of the Review

As a result of this administrative review, Commerce determines that the following estimated weighted-average dumping margins exist for the period, September 1, 2021, through August 31, 2022:

Exporter/producer	Weighted-average dumping margin (percent)
ITC Limited	23.16
Navneet Education Ltd	0.00
Cellpage Ventures Private Limited	23.16
Dinakar Process Private Limited	23.16
Lotus Global Private Limited	23.16
Pioneer Stationery Private Limited	23.16
PP Bafna Ventures Private Limited	23.16
SGM Paper Products	23.16

Disclosure

Normally, Commerce will disclose to interested parties the calculations performed in connection with the final results of review withing five days of any public announcement or, if there is no public announcement, within five days of the date of publication of this notice in the **Federal Register**, in accordance with 19 CFR 351.224(b). However, because we have made no changes to the *Preliminary Results,* there are no new calculations to disclose.

Assessment Rates

Pursuant to section 751(a)(2)(C) of the Act and 19 CFR 351.212(b), Commerce will determine, and CBP shall assess, antidumping duties on all appropriate entries of subject merchandise in accordance with the final results of this review. Pursuant to 19 CFR 351.212(b)(1), for ITC Limited and Navneet Education Ltd., we calculated importer-specific antidumping duty assessment rates by aggregating the total amount of dumping calculated for the examined sales of each importer and dividing each of these amounts by the total entered value associated with those sales. Where either the respondent's weighted-average dumping margin is zero or *de minimis* within the meaning of 19 CFR 351.106(c)(1), or an importer-specific assessment rate is zero or *de minimis,* we will instruct CBP to liquidate the appropriate entries without regard to antidumping duties.

Commerce's ''automatic assessment'' will apply to entries of subject merchandise during the POR for which the examined companies did not know that the merchandise they sold to an intermediary (*e.g.,* a reseller, trading company, or exporter) was destined for the United States. In such instances, we will instruct CBP to liquidate unreviewed entries at the all-others rate if there is no rate for the intermediate company(ies) involved in the transaction.

Further, the assessment rate for antidumping duties for each of the companies not selected for individual examination will be equal to the weighted-average dumping margin identified above in the ''Final Results of the Review.'' Commerce intends to issue assessment instructions to CBP no earlier than 35 days after the date of publication of the final results of this review in the **Federal Register**. If a timely summons is filed at the U.S. Court of International Trade, the assessment instructions will direct CBP not to liquidate relevant entries until the time for parties to file a request for a statutory injunction has expired (*i.e.,* within 90 days of publication).

Cash Deposit Requirements

The following cash deposit requirements for estimated antidumping duties will be effective for all shipments of subject merchandise entered, or withdrawn from warehouse, for consumption on or after the publication date of the final results of this administrative review, as provided by section 751(a)(2)(C) of the Act: (1) the cash deposit rates for the companies identified above in the ''Final Results of the Review'' section will be equal to the company-specific weighted-average dumping margin established in the final results of this administrative review; (2) for merchandise exported by a company not covered in this administrative review but covered in a completed prior segment of the proceeding, the cash deposit rate will continue to be the company-specific rate published for the most recently completed segment of this proceeding; (3) if the exporter is not a firm covered in this review or completed prior segment of this proceeding but the producer is, the cash deposit rate will be the company-specific rate established in the completed segment for the most recent

[12] *See, e.g., Magnesium Metal from the Russian Federation: Preliminary Results of Antidumping Duty Administrative Review,* 75 FR 26922, 26923 (May 13, 2010), unchanged in *Magnesium Metal from the Russian Federation: Final Results of Antidumping Duty Administrative Review,* 75 FR 56989 (September 17, 2010).

period for the producer of the merchandise; and (4) the cash deposit rate for all other producers or exporters will continue to be 3.91 percent *ad valorem,* the all-others rate established in the investigation of this proceeding.[13] These cash deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Importers

This notice serves as a final reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping and/or countervailing duties prior to liquidation of the relevant entries during this POR. Failure to comply with this requirement could result in the Commerce's presumption that reimbursement of antidumping and/or countervailing duties has occurred and the subsequent assessment of double antidumping duties and/or an increase in the amount of antidumping duties by the amount of the countervailing duties.

Administrative Protective Order

This notice also serves as a final reminder to parties subject to administrative protective order (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3), which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of the return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

Notification to Interested Parties

We are issuing and publishing this notice in accordance with sections 751(a)(1) and 777(i)(1) of the Act, and 19 CFR 351.221(b)(5) and 19 CFR 351.213(h)(1).

Dated: March 28, 2024.

Abdelali Elouaradia,

Deputy Assistant Secretary for Enforcement and Compliance.

Appendix—List of Topics Discussed in the Issues and Decision Memorandum

I. Summary
II. Background
III. Scope of the *Order*
IV. Discussion of the Issues
Comment 1: Whether Navneet's E-Commerce Sales Were Made at the Same Level of Trade as its Home Market Sales in Channels Two, Three, Four, and Five
Comment 2: Whether Commerce Should Continue to Find Dinakar Process Private Limited Subject to this Review
V. Recommendation

[FR Doc. 2024–07904 Filed 4–12–24; 8:45 am]

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[13] *See Order.*

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–985]

Xanthan Gum From the People's Republic of China: Continuation of Antidumping Duty Order

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: As a result of the determinations by the U.S. Department of Commerce (Commerce) and the U.S. International Trade Commission (ITC) that revocation of the antidumping duty (AD) order on xanthan gum from the People's Republic of China (China) would likely lead to the continuation or recurrence of dumping and material injury to an industry in the United States, Commerce is publishing a notice of continuation of this AD order.

DATES: Applicable April 5, 2024.

FOR FURTHER INFORMATION CONTACT: Luke Caruso, AD/CVD Operations, Office IV, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–2081.

SUPPLEMENTARY INFORMATION:

Background

On July 19, 2013, Commerce published in the **Federal Register** the AD order on xanthan gum from China.[1] On October 2, 2023, the ITC instituted,[2] and Commerce initiated,[3] the sunset review of the *Order,* pursuant to section 751(c) of the Tariff Act of 1930, as amended (the Act). As a result of its review, Commerce determined that revocation of the *Order* would likely lead to the continuation or recurrence of dumping, and therefore, notified the ITC of the magnitude of the margins of dumping likely to prevail should the *Order* be revoked.[4]

On April 5, 2024, the ITC published its determination, pursuant to sections 751(c) and 752(a) of the Act, that revocation of the *Order* would likely lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[5]

Scope of the Order

The scope of this order covers dry xanthan gum, whether or not coated or blended with other products. Further, xanthan gum is included in this order regardless of physical form, including, but not limited to, solutions, slurries, dry powders of any particle size, or unground fiber.

Xanthan gum that has been blended with other product(s) is included in this scope when the resulting mix contains 15 percent or more of xanthan gum by dry weight. Other products with which xanthan gum may be blended include, but are not limited to, sugars, minerals, and salts.

Xanthan gum is a polysaccharide produced by aerobic fermentation of Xanthomonas campestris. The chemical structure of the repeating pentasaccharide monomer unit consists of a backbone of two P-1,4-D-Glucose monosaccharide units, the second with a trisaccharide side chain consisting of P-D-Mannose-(1,4)-P-DGlucuronic acid-(1,2)-a-D-Mannose monosaccharide units. The terminal mannose may be pyruvylated and the internal mannose unit may be acetylated.

Merchandise covered by the scope of this order is classified in the Harmonized Tariff Schedule (''HTS'') of the United States at subheadings 3913.90.20, 3913.90.2015, and 3824.99.4900. This tariff classification is provided for convenience and customs purposes; however, the written description of the scope is dispositive.

Continuation of the Order

As a result of the determinations by Commerce and the ITC that revocation of the *Order* would likely lead to continuation or recurrence of dumping, and material injury to an industry in the United States, pursuant to section 751(d)(2) of the Act, Commerce hereby orders the continuation of the *Order.* U.S. Customs and Border Protection will continue to collect AD cash deposits at the rates in effect at the time of entry for all imports of subject merchandise.

[1] *See Xanthan Gum from the People's Republic of China: Amended Final Determination of Sales at Less than Fair Value and Antidumping Duty Order,* 78 FR 43143 (July 19, 2023) (*Order*).

[2] *See Xanthan Gum From China; Institution of a Five-Year Review,* 88 FR 67809 (October 2, 2023).

[3] *See Initiation of Five-Year (Sunset) Reviews,* 88 FR 67729 (October 2, 2023).

[4] *See Xanthan Gum from the People's Republic of China: Final Results of the Expedited Second Sunset Review of the Antidumping Duty Order,* 89 FR 7363 (February 2, 2024), and accompanying Issues and Decision Memorandum.

[5] *See Xanthan Gum from China; Determination,* 89 FR 24033 (April 5, 2024) (*ITC Final Determination*).

The effective date of the continuation of the *Order* will be April 5, 2024.[6] Pursuant to section 751(c)(2) of the Act and 19 CFR 351.218(c)(2), Commerce intends to initiate the next five-year review of the *Order* not later than 30 days prior to fifth anniversary of the date of the last determination by the ITC.

Administrative Protective Order (APO)

This notice also serves as a final reminder to parties subject to an APO of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3), which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of the return or destruction of APO materials, or conversion to judicial protective order, is hereby requested. Failure to comply with the regulations and terms of an APO is a violation which is subject to sanction.

Notification to Interested Parties

This five-year (sunset) review and this notice are in accordance with sections 751(c) and 751(d)(2) of the Act and published in accordance with section 777(i) of the Act, and 19 CFR 351.218(f)(4).

Dated: April 9, 2024.

Ryan Majerus,

Deputy Assistant Secretary for Policy and Negotiations, performing the non-exclusive functions and duties of the Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–07859 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–DS–P

[6] *See ITC Final Determination.*

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–016]

Certain Passenger Vehicle and Light Truck Tires From the People's Republic of China: Amended Final Results of Antidumping Duty Administrative Review; 2021–2022

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

SUMMARY: The U.S. Department of Commerce (Commerce) is amending the final results of the administrative review of the antidumping duty order on passenger vehicle and light truck tires from the People's Republic of China (China) to correct a ministerial error. The period of review (POR) is August 1, 2021, through July 31, 2022.

DATES: Applicable April 15, 2024.

FOR FURTHER INFORMATION CONTACT: Caroline Carroll, AD/CVD Operations, Office IX, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–4948.

SUPPLEMENTARY INFORMATION:

Background

On March 12, 2024, Commerce published the *Final Results* in the **Federal Register**.[1] Also on March 12, 2024, we received a timely submitted ministerial error allegation from Giti.[2] On March 13, 2024, we received rebuttal comments from the petitioner.[3] We are amending the *Final Results* to correct the ministerial error Giti alleged.

Legal Framework

Section 751(h) of the Tariff Act of 1930, as amended (the Act), defines a ''ministerial error'' as including ''errors in addition, subtraction, or other arithmetic function, clerical errors resulting from inaccurate copying, duplication, or the like, and any other unintentional error which the administering authority considers ministerial.'' [4] With respect to final results of administrative reviews, 19 CFR 351.224(e) provides that Commerce ''will analyze any comments received and, if appropriate, correct any . . . ministerial error by amending the final results of review . . .''

[1] *See Certain Passenger Vehicle and Light Truck Tires from the People's Republic of China: Final Results of Antidumping Duty Administrative Review and Final Determination of No Shipments; 2021–2022,* 89 FR 17817 (March 12, 2024) (*Final Results*), and accompanying Issues and Decision Memorandum (IDM).

[2] *See* Giti's Letter, ''Ministerial Errors Comment,'' dated March 12, 2024 (Ministerial Error Comments). Giti consists of the following companies: Giti Tire Global Trading Pte. Ltd.; Giti Radial Tire (Anhui) Company Ltd.; Giti Tire (Fujian) Company Ltd.; Giti Tire (Hualin) Company, Ltd.; Giti Tire Greatwall Company. Ltd.; Giti Tire (Anhui) Company; Giti Tire (Yinchuan) Company Ltd.; and Giti Tire (Chongqing) Company Ltd. (collectively, Giti).

[3] The petitioner is the United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union, AFL–CIO, CLC. *See* Petitioner's Letter, ''Request to Reject Giti's Untimely New Argument,'' dated March 13, 2024.

[4] *See* 19 CFR 351.224(f).

Ministerial Error

In the *Final Results,* we continued to rely on a boat freight surrogate value using data from Maersk stated on a U.S. dollar per-kilogram basis.[5] In its Ministerial Error Comments, Giti alleged that Commerce intended to value the boat freight surrogate value on a per-kilogram, per-kilometer basis, noting that, in the calculation of boat freight, Commerce multiplied the input quantity in kilograms by both the boat freight surrogate value and a distance in kilometers.[6]

We agree with Giti that we made a ministerial error in the *Final Results* pursuant to section 751(h) of the Act and 19 CFR 351.224(f) and have amended our calculations to correct the calculation of boat freight to remove the distance in kilometers.

Pursuant to 19 CFR 351.224(e), we are amending the *Final Results* to correct this ministerial error in the calculation of the weighted-average dumping margin for Giti, which changes from 53.41 percent to 20.52 percent. Furthermore, based on the revised weighted-average dumping margin calculated for Giti, we are also amending the rate for the companies not selected for individual examination in this review, which changes from 27.94 percent to 11.50 percent.[7]

For a complete discussion of the ministerial error allegation, as well as Commerce's analysis, *see* the accompanying Ministerial Error Memorandum.[8] The Ministerial Error Memorandum is a public document and is on file electronically via ACCESS. ACCESS is available to registered users at *https://access.trade.gov.*

Amended Final Results of Review

As a result of correcting the ministerial error described above, we determine the following estimated weighted-average dumping margins for the period August 1, 2021, through July 31, 2022:

[5] *See Final Results* IDM at Comment 10.

[6] *See* Ministerial Error Comments at 3.

[7] *See* Memorandum, ''Calculation of the Amended Final Cash Deposit Rate for Non-Selected Companies,'' dated concurrently with this notice.

[8] *See* Memorandum, ''Analysis of Ministerial Error Allegation,'' dated concurrently with, and hereby adopted by, this notice (Ministerial Error Memorandum); *see also* Memorandum, ''Calculations for Giti for the Amended Final Results,'' dated concurrently with this notice.

Exporter	Weighted-average dumping margin (percent)
Giti Tire Global Trading Pte. Ltd.; Giti Radial Tire (Anhui) Company Ltd.; Giti Tire (Fujian) Company Ltd.; Giti Tire (Hualin) Company Ltd.; Giti Tire Greatwall Company, Ltd.; Giti Tire (Anhui) Company, ltd.; Giti Tire (Yinchuan) Company, Ltd.; and Giti Tire (Chongqing) Company, Ltd	20.52
Companies Not Selected for Individual Review [9]	11.50

Disclosure

We intend to disclose the calculations performed in connection with these amended final results of review to parties in this review within five days of the date of publication of this notice in the **Federal Register**, in accordance with 19 CFR 351.224(b).

Assessment Rates

Pursuant to section 751(a)(2)(C) of the Act, and 19 CFR 351.212(b)(1), Commerce has determined, and U.S. Customs and Border Protection (CBP) shall assess, antidumping duties on all appropriate entries of subject merchandise in accordance with the amended final results of this review. Commerce intends to issue assessment instructions to CBP no earlier than 35 days after the date of publication of the amended final results of this review in the **Federal Register**. If a timely summons is filed at the U.S. Court of International Trade, the assessment instructions will direct CBP not to liquidate relevant entries until the time for parties to file a request for a statutory injunction has expired (*i.e.,* within 90 days of publication).

For Giti and Sumitomo, we calculated importer-specific assessment rates on the basis of the ratio of the total amount of antidumping duties calculated for each importer's examined sales and the total entered value of the sales, in accordance with 19 CFR 351.212(b)(1).[10] Where either a respondent's weighted-average dumping margin is zero or *de minimis,* within the meaning of 19 CFR 351.106(c)(1) of the Act, or an importer-specific rate is zero or *de minimis,* we will instruct CBP to liquidate appropriate entries without regard to antidumping duties.

Pursuant to Commerce's assessment practice,[11] for entries that were not reported in the U.S. data submitted by Giti, we will instruct to CBP to liquidate such entries at the China-wide rate (*i.e.,* 76.46 percent).[12]

For the respondents not selected for individual examination in this administrative review that qualified for a separate rate, the assessment rate will be equal to the simple average of the margin calculated for Giti in these amended final results and Sumitomo in the *Final Results.*

Cash Deposit Requirements

The following amended cash deposit requirements will be effective for all shipments of the subject merchandise entered, or withdrawn from warehouse, for consumption on or after March 12, 2024, the publication date of the *Final Results,* as provided by section 751(a)(2)(C) of the Act: (1) the amended cash deposit rate for Giti and the other exporters not individually examined in this administrative review that have a separate rate, the cash deposit rate will be the rate established in the amended final results of review (except, if the rate is zero or *de minimis,* then a cash deposit rate of zero will be established for that company); (2) for previously investigated or reviewed exporters not listed in the table above that have separate rates, the cash deposit rate will continue to be the existing exporter-specific rate published for the most recently-completed segment of this proceeding; (3) for all Chinese exporters of subject merchandise that have not been found to be entitled to a separate rate, the cash deposit rate will be the rate for the China-wide entity (*i.e.,* 76.46 percent); and (4) for all exporters of subject merchandise which are not located in China and have not received their own rate, the cash deposit rate will be the rate applicable to the Chinese exporter(s) that supplied that non-China exporter. These cash deposit requirements, when imposed, shall remain in effect until further notice.

Notification to Importers

This notice serves as a final reminder to importers of their responsibility under 19 CFR 351.402(f)(2) to file a certificate regarding the reimbursement of antidumping duties prior to liquidation of the relevant entries during this review period. Failure to comply with this requirement could result in Commerce's presumption that reimbursement of antidumping duties occurred and the subsequent assessment of double antidumping duties.

Administrative Protective Order

This notice serves as the final reminder to parties subject to administrative protective order (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3), which continues to govern business proprietary information in this segment of the proceeding. Timely written notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

Notification to Interested Parties

We are issuing and publishing these amended final results of review in accordance with sections 751(h) and 777(i) of the Act, and 19 CFR 351.224(e).

Dated: March 29, 2024.

Abdelali Elouaradia,

Deputy Assistant Secretary for Enforcement and Compliance.

Appendix

Separate Rate Companies

1. Anhui Jichi Tire Co., Ltd.
2. Hankook Tire China Co., Ltd.
3. Jiangsu Hankook Tire Co., Ltd.
4. Koryo International Industrial Limited
5. Mayrun Tyre (Hong Kong) Limited
6. Qingdao Keter International Co., Limited
7. Qingdao Sentury Tire Co., Ltd.; Sentury (Hong Kong) Trading Co., Limited
8. Qingdao Sunfulcess Tyre Co., Ltd.
9. Shandong Haohua Tire Co., Ltd.
10. Shandong Linglong Tyre Co., Ltd.
11. Shandong New Continent Tire Co., Ltd.
12. Shandong Province Sanli Tire

[9] *See* the appendix for the list of these companies.

[10] Sumitomo's dumping margin did not change in these amended final results.

[11] *See Non-Market Economy Antidumping Proceedings: Assessment of Antidumping Duties,* 76 FR 65694 (October 24, 2011), for a full discussion of this practice.

[12] *See Certain Passenger Vehicle and Light Truck Tires from the People's Republic of China: Amended Final Affirmative Antidumping Duty Determination and Antidumping Duty Order; and Amended Final Affirmative Countervailing Duty Determination and Countervailing Duty Order,* 80 FR 47902, 47906 (August 10, 2015) (*Order*).

Manufactured Co., Ltd.

[FR Doc. 2024–07902 Filed 4–12–24; 8:45 am]

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DEPARTMENT OF COMMERCE

International Trade Administration

[C–201–861]

Aluminum Extrusions From Mexico: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination; Correction and Retraction

AGENCY: Enforcement and Compliance, International Trade Administration, Department of Commerce.

ACTION: Notice; correction and retraction.

SUMMARY: The U.S. Department of Commerce (Commerce) published two notices in the **Federal Register** on March 15, 2024. One notice is a correction notice that contains a typographical error and the other notice is a duplicate of a previously published notice.

FOR FURTHER INFORMATION CONTACT: Christopher Williams, AD/CVD Operations, Office I, Enforcement and Compliance, International Trade Administration, U.S. Department of Commerce, 1401 Constitution Avenue NW, Washington, DC 20230; telephone: (202) 482–5166.

SUPPLEMENTARY INFORMATION:

Background

On March 15, 2024, Commerce published in the **Federal Register** a correction (FR Doc. C1–2024–05068) [1] and a duplicate (FR Doc. 2024–05534) [2] of *Aluminum Extrusions from Mexico: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination,* 89 FR 17387 (March 11, 2024) (*Preliminary Determination*). FR Doc. C1–2024–05068 misidentifies the **Federal Register** document number of the *Preliminary Determination.* FR Doc. 2024–05534 is an inadvertently published duplicate notice of the *Preliminary Determination.*

Correction

In the **Federal Register** of March 15, 2024, in FR Doc C1–2024–05068, on page 18894, in the third column, correct 2024–05086 to 2024–05068.

Retraction

From the **Federal Register** of March 15, 2024, pages 18894 to 18899, retract FR Doc 2024–05534. As such, FR Doc 2024–05534 should be disregarded.

Notification to Interested Parties

This notice is issued and published in accordance with section 703(f) and 777(i)(1) of the Tariff Act of 1930, as amended, and 19 CFR 351.205(c).

Dated: April 9, 2024.

Ryan Majerus,

Deputy Assistant Secretary for Policy and Negotiations, performing the non-exclusive functions and duties of the Assistant Secretary for Enforcement and Compliance.

[FR Doc. 2024–07857 Filed 4–12–24; 8:45 am]

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[1] *See Aluminum Extrusions from Mexico: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination; Correction,* 89 FR 18894 (March 15, 2024) (FR Doc. C1–2024–05068).

[2] *See Aluminum Extrusions from Mexico: Preliminary Affirmative Countervailing Duty Determination and Alignment of Final Determination With Final Antidumping Duty Determination,* 89 FR 18894 (March 15, 2024) (FR Doc. 2024–05534).

DEPARTMENT OF COMMERCE

National Institute of Standards and Technology

Open Meeting of the Internet of Things Advisory Board

AGENCY: National Institute of Standards and Technology (NIST).

ACTION: Notice of open meeting.

SUMMARY: The Internet of Things (IoT) Advisory Board will meet Tuesday, May 14 and Wednesday, May 15, 2024 from 11:00 a.m. until 5:00 p.m., eastern time. Both sessions will be open to the public.

DATES: The Internet of Things (IoT) Advisory Board will meet Tuesday, May 14 and Wednesday, May 15, 2024 from 11:00 a.m. until 5:00 p.m., eastern time.

ADDRESSES: The meeting will be virtual via Webex webcast hosted by the National Cybersecurity Center of Excellence (NCCoE) at NIST. Please note registration instructions under the **SUPPLEMENTARY INFORMATION** section of this notice.

FOR FURTHER INFORMATION CONTACT: Barbara Cuthill, Information Technology Laboratory, National Institute of Standards and Technology, Telephone: (301) 975–3273, Email address: *barbara.cuthill@nist.gov.*

SUPPLEMENTARY INFORMATION: Pursuant to the Federal Advisory Committee Act, as amended, 5 U.S.C. 1001 *et seq.,* notice is hereby given that the IoT Advisory Board will hold open meetings on the dates and times given in the **DATES** section. Both sessions will be open to the public. The IoT Advisory Board is authorized by section 9204(b)(5) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116–283) and advises the IoT Federal Working Group convened by the Secretary of Commerce pursuant to section 9204(b)(1) of the Act on matters related to the Federal Working Group's activities. Details regarding the IoT Advisory Board's activities are available at *https://www.nist.gov/itl/applied-cybersecurity/nist-cybersecurity-iot-program/internet-things-advisory-board.*

The agenda for the May 14–15, 2024 meeting is expected to focus on finalizing the IoT Advisory Board's report for the IoT Federal Working Group and the recommendations and findings in that report.

The recommendations, findings and discussions are expected to focus on the specific focus areas for the report cited in the legislation and the charter:

- Smart traffic and transit technologies,
- Augmented logistics and supply chains,
- Sustainable infrastructure,
- Precision agriculture,
- Environmental monitoring,
- Public safety, and
- Health care.

In addition, the IoT Advisory Board may discuss other elements that the legislation called for in the report:

- whether adequate spectrum is available to support the growing Internet of Things and what legal or regulatory barriers may exist to providing any spectrum needed in the future;
- policies, programs, or multi-stakeholder activities that—
  - promote or are related to the privacy of individuals who use or are affected by the Internet of Things;
  - may enhance the security of the Internet of Things, including the security of critical infrastructure;
  - may protect users of the Internet of Things; and
  - may encourage coordination among Federal agencies with jurisdiction over the Internet of Things.

Note that agenda items may change without notice. The final agendas will be posted on the IoT Advisory Board web page: *https://www.nist.gov/itl/applied-cybersecurity/nist-cybersecurity-iot-program/internet-things-advisory-board.*

Public Participation: Written comments and requests to present comments orally to the IoT Advisory Board from the public are invited and

may be submitted electronically by email to Barbara Cuthill at the contact information indicated in the **FOR FURTHER INFORMATION CONTACT** section of this notice by 5 p.m. on the Tuesday, May 7, 2024 to allow distribution of written comments to IoT Advisory Board members prior to the meeting.

Each IoT Advisory Board meeting agenda will include a period, not to exceed sixty minutes, for oral presentation of comments from the public. Oral presentation of comments from the public during this sixty-minute period will be accommodated on a first-come, first-served basis and limited to five minutes per person for oral presentation if requested by the commenter.

Members of the public who wish to expand upon their submitted comments, those who had wished to present comments orally but could not be accommodated on the agenda, and those who were unable to attend the meeting via webinar, are invited to submit written statements. In addition, written statements are invited and may be submitted to the IoT Advisory Board at any time. All written statements should be directed to the IoT Advisory Board Secretariat, Information Technology Laboratory by email to: *Barbara.Cuthill@nist.gov.*

Admittance Instructions: Participants planning to attend via webinar must register via the instructions found on the IoT Advisory Board's web page at h*ttps://www.nist.gov/itl/applied-cybersecurity/nist-cybersecurity-iot-program/internet-things-advisory-board.*

Alicia Chambers,

NIST Executive Secretariat.

[FR Doc. 2024–07912 Filed 4–12–24; 8:45 am]

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Public Meeting of the Ocean Exploration Advisory Board

AGENCY: Office of Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce (DOC).

ACTION: Notice of public meeting.

SUMMARY: This notice sets forth the schedule and proposed agenda for a meeting of the Ocean Exploration Advisory Board (OEAB). OEAB members will discuss and provide advice on the Federal ocean exploration program, with a particular emphasis on the topics identified in the section on Matters to Be Considered.

DATES: The announced meeting is scheduled for Tuesday, May 14 through Wednesday, May 15, 2024 from 9:00 a.m.–5:00 p.m. (EDT).

ADDRESSES: This will be an in-person meeting held in Silver Spring, MD. Information about how to observe virtually will be posted to the OEAB website at *https://oeab.noaa.gov/.*

FOR FURTHER INFORMATION CONTACT: Mr. David Turner, Designated Federal Officer, Ocean Exploration Advisory Board, National Oceanic and Atmospheric Administration, *David.Turner@NOAA.gov* or (859) 327–9661.

SUPPLEMENTARY INFORMATION: NOAA established the OEAB under the Federal Advisory Committee Act (FACA) and legislation that gives the agency statutory authority to operate an ocean exploration program and to coordinate a national program of ocean exploration. The OEAB advises NOAA leadership on strategic planning, exploration priorities, competitive ocean exploration grant programs, and other matters as the NOAA Administrator requests.

OEAB members represent government agencies, the private sector, academic institutions, and not-for-profit institutions involved in all facets of ocean exploration—from advanced technology to citizen exploration.

In addition to advising NOAA leadership, NOAA expects the OEAB to help to define and develop a national program of ocean exploration—a network of stakeholders and partnerships advancing national priorities for ocean exploration.

Matters To Be Considered: The OEAB will be briefed on the status of the NOAA Ship *Discoverer,* a new oceanographic research vessel being built for NOAA that will have Ocean Exploration as its primary mission; receive a briefing about the status and activities associated with the Beyond the Blue: Illuminating the Pacific Campaign; discuss communications across the ocean exploration community, with a focus on Industry and non-governmental actors; and the OEAB will deliver and present recommendations to the NOAA Administrator about ways NOAA can push the boundaries within the ocean exploration field. The agenda and other meeting materials will be made available on the OEAB website at *https://oeab.noaa.gov/.*

Status: The meeting will be open to the public via remote access. Please check the agenda on the OEAB website to confirm the public comment period schedule.

The OEAB expects that public statements at its meetings will not be repetitive of previously submitted verbal or written statements. In general, each individual or group making a verbal presentation will be limited to three minutes. The Designated Federal Officer must receive written comments by May 6, 2024, to provide sufficient time for OEAB review. Written comments received after May 6, 2024, will be distributed to the OEAB but may not be reviewed prior to the meeting date. Comments should be submitted to Designated Federal Officer *David.Turner@NOAA.gov.*

Special Accomodations: Requests for sign language interpretation or other auxiliary aids should be directed to the Designated Federal Officer by May 6, 2024.

David Holst,

Chief Financial and Administrative Officer, Office of Oceanic and Atmospheric Research, National Oceanic and Atmospheric Administration.

[FR Doc. 2024–07916 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–KA–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Socioeconomics of Coral Reef Conservation

The Department of Commerce will submit the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995, on or after the date of publication of this notice. We invite the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us assess the impact of our information collection requirements and minimize the public's reporting burden. Public comments were previously requested via the **Federal Register** on January 5, 2024, during a 60-day comment period. This notice allows for an additional 30 days for public comments.

Agency: National Oceanic & Atmospheric Administration (NOAA), Commerce.

Title: Socioeconomics of Coral Reef Conservation.

OMB Control Number: 0648–0646.

Form Number(s): None.

Type of Request: Revision and extension of a current information collection.

Number of Respondents: 9,840.

Average Hours per Response: 20 minutes (0.33 hours).

Total Annual Burden Hours: 1,093 hours.

Needs and Uses: This request is for revision and extension to an approved collection of information, OMB Control Number 0648–0646, under the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.,* and implementing regulations at 5 CFR part 1320. This previously-approved information collection assists NOAA in the administration of the National Coral Reef Monitoring Program (NCRMP), which was established by the NOAA Coral Reef Conservation Program (CRCP) under the authority of the Coral Reef Conservation Act of 2000, 16 U.S.C. 6401 *et seq.* This act authorizes CRCP to, among other things, conserve and restore the condition of United States coral reef ecosystems and enhance public awareness, understanding, and appreciation of coral reefs and coral reef ecosystems and their ecological and socioeconomic value. In accordance with its mission goals, NOAA developed a survey to track relevant information regarding each jurisdiction's population, social and economic structure, the benefits of coral reefs and related habitats, the impacts of society on coral reefs, and the impacts of coral management on communities. The survey is repeated in each jurisdiction every five to seven years in order to provide longitudinal data and information for managers to effectively conserve coral reefs for current and future generations.

The purpose of this information collection is to obtain human dimensions information from residents in the seven United States (U.S.) jurisdictions containing coral reefs: Florida, U.S. Virgin Islands (USVI), Puerto Rico, Hawai'i, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI). Specifically, NOAA is seeking information on the behaviors and activities related to coral reefs, as well as information on perceptions of coral reef conditions and attitudes toward specific reef conservation activities. Each survey has a core set of questions that are asked across all jurisdictions to allow for information to be tracked over time and across jurisdictions. To account for geographical, cultural and linguistic differences between jurisdictions, the survey questions include items that are specific to the local context and developed based on jurisdictional partner feedback.

We intend to use the information collected through this instrument for research purposes, as well as for measuring and improving the results of our reef protection programs. Because many of our efforts to protect reefs rely on education and changing attitudes toward reef protection, the information collected will allow CRCP to ensure that programs are designed appropriately at the start, future program evaluation efforts are as successful as possible, and outreach efforts are targeting the intended recipients with useful information.

No survey question concept or theory has changed since the first hybrid-generic clearance of this information collect request in 2021. However, NOAA sought feedback from survey administration teams and jurisdictional partners in American Samoa (2021), Puerto Rico (2022), and Guam (2023), as well as during preparation for survey administration in the CNMI (2024) and the USVI (2025). Responses came primarily from state and local natural resource management agencies, fisheries management councils and NGOs. In addition, NOAA adjusted each of the jurisdictional surveys based on respondents' feedback to the instrument. This feedback resulted in non-substantive survey instrument revisions that reduce question complexity, reduce respondent burden, simplify terminology for translation into other languages, improve clarity, and maintain consistent formatting.

Affected Public: Individuals or households.

Frequency: Every 5–7 years.

Respondent's Obligation: Voluntary.

Legal Authority: Coral Reef Conservation Act of 2000.

This information collection request may be viewed at *www.reginfo.gov.* Follow the instructions to view the Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function and entering either the title of the collection or the OMB Control Number 0648–0646.

Sheleen Dumas,

Department PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024–07898 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–08–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Agency Information Collection Activities; Submission to the Office of Management and Budget (OMB) for Review and Approval; Comment Request; Marine Mammal Stranding Reports/Marine Mammal Rehabilitation Disposition Report/Human Interaction Data Sheet

The Department of Commerce will submit the following information collection request to the Office of Management and Budget (OMB) for review and clearance in accordance with the Paperwork Reduction Act of 1995, on or after the date of publication of this notice. We invite the general public and other Federal agencies to comment on proposed, and continuing information collections, which helps us assess the impact of our information collection requirements and minimize the public's reporting burden. Public comments were previously requested via the **Federal Register** on February 7, 2024 during a 60-day comment period. This notice allows for an additional 30 days for public comments.

Agency: National Oceanic and Atmospheric Administration, Commerce.

Title: Marine Mammal Stranding Reports/Marine Mammal Rehabilitation Disposition Report/Human Interaction Data Sheet.

OMB Control Number: 0648–0178.

Form Number(s): NOAA Form 89–864.

Type of Request: Regular submission (1 year extension of a current information collection).

Number of Respondents: 400.

Average Hours per Response: 1 hour.

Total Annual Burden Hours: 8,675.

Needs and Uses: This request is for a 1 year extension of this previously approved data collection. An extension is requested in order to provide time for the program office to address revisions to the collection pursuant to a recent law. Under the Marine Mammal Protection Act (MMPA), the Secretary of Commerce (Secretary), who has delegated responsibility under this Act

to the National Oceanic and Atmospheric Administration (NOAA) Assistant Administrator for Fisheries, is charged with the protection and management of marine mammals and is responsible for collecting information on marine mammal strandings, which will be compiled and analyzed, by region, to monitor species, numbers, conditions, and causes of illnesses and deaths of stranded animals. The Secretary is also responsible for collection of information on other life history and reference level data, including marine mammal tissue analyses, that would allow comparison of the causes of illness and deaths in stranded marine mammals by physical, chemical, and biological environmental parameters.

In addition, determinations must be made on the sustainability of population stocks, on the impact of fisheries and other human activities on marine mammals and endangered species, and on the health of marine mammals and related environmental considerations. NOAA's National Marine Fisheries Service (NMFS) has the responsibility to carry out these mandates.

Section 402(b) of the MMPA (16 U.S.C. 1421a) requires the Secretary to collect and update information on strandings. It further provides that the Secretary shall compile and analyze, by region, the species, numbers, conditions, and causes of illnesses and deaths in stranded marine mammals. Section 404 (a) of the MMPA (16 U.S.C. 1421c) mandates that the Secretary respond to unusual marine mammal mortality events. Without a historical baseline provided by marine mammal information collected from strandings, detection of such events could be difficult and the investigation could be impeded. Section 401(b) of the MMPA (16 U.S.C. 1421) requires NMFS to facilitate the collection and dissemination of reference data on the health of marine mammal populations in the wild and to correlate health with physical, chemical, and biological environmental parameters. In order to perform this function, NMFS must standardize data collection protocols for health and correlations. Data and samples collected from stranded animals are a critical part of the implementation of this mandate of the MMPA.

Specifically, the data from the Marine Mammal Stranding Report (MMSR) forms provide NMFS with information on the morphology, life history, biology, general health, health and stranding trends, causes of mortality, and distribution of marine mammal species. These data provide information which may help in making assessments on the status of population stocks. Recording data on gross mortalities may serve as an indicator that a particular population is impacted, threatened or at increased risk, and when provided in a timely manner, aid in dynamic management practices. Stranding data also provide an important baseline for detecting and monitoring the impacts of environmental phenomena, such as El Niño and Harmful Algal Blooms (HABs). Minor edits to the current version of the form are proposed, including beginning to collect live, entangled large whale data in this data collection and streamlining the confidence codes.

The Marine Mammal Rehabilitation Disposition Report (MMRDR) provides NMFS with information on the disposition of animals brought in for rehabilitation, the success of medical treatment, and the number of animals released. This information will assist the Agency in tracking marine mammals that move into captive display and in the monitoring of rehabilitation and release. The data will also be used to assess the burden on stranding network centers. This form will be filled out only in the case of live-stranded marine mammals. The form will be required from rehabilitation centers in all five NMFS Regions. Each of the NMFS regions approves and issues a Letter of Agreement (LOA) or other form of agreement to marine mammal rehabilitation centers under § 112(c) of the MMPA, which allows the Secretary to enter into agreements in order to fulfill the general purposes of the Act, and under § 403 of the MMPA, which provides specific authority to enter into such stranding response agreements. These data will be monitored as part of the Rehabilitation Facilities Inspection (RFI) program. No changes are proposed to this form.

The Human Interaction Data Sheet will provide NMFS with consistent and detailed information on signs of human interaction in stranded marine mammals. This form also includes a subjective section that allows the examiner to evaluate the likelihood that human interaction contributed to the stranding of the animal. This information will assist the Agency in tracking resource conflicts and will provide a solid scientific foundation for conservation and management of marine mammals. With a better understanding of interactions, appropriate measures can be taken to resolve conflicts and stranding data are the best source of information regarding the occurrence of different types of human interaction. No changes are proposed for this form.

Affected Public: State governments; not-for-profit institutions; business or other for-profits organizations.

Frequency: On occasion.

Respondent's Obligation: Mandatory.

Legal Authority: Marine Mammal Protection Act (MMPA).

This information collection request may be viewed at *www.reginfo.gov.* Follow the instructions to view the Department of Commerce collections currently under review by OMB.

Written comments and recommendations for the proposed information collection should be submitted within 30 days of the publication of this notice on the following website *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function and entering either the title of the collection or the OMB Control Number 0648–0178.

Sheleen Dumas,

Department PRA Clearance Officer, Office of the Under Secretary for Economic Affairs, Commerce Department.

[FR Doc. 2024–07896 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–22–P

DEPARTMENT OF COMMERCE

National Technical Information Service

National Technical Information Service Advisory Board

AGENCY: National Technical Information Service.

ACTION: Notice of open meeting.

SUMMARY: This notice announces the next meeting of the National Technical Information Service (NTIS) Advisory Board (the Advisory Board).

DATES: The Advisory Board will meet on Monday, June 24, 2024, from 12:30 p.m. to approximately 4:30 p.m., eastern time.

ADDRESSES: This will be a virtual meeting with registration access requirements for attendance. Please note admittance instructions under the **SUPPLEMENTARY INFORMATION** section of this notice.

FOR FURTHER INFORMATION CONTACT: Elizabeth Shaw, (703) 605–6136, *eshaw@ntis.gov* or Steven Holland at *sholland@ntis.gov*.

SUPPLEMENTARY INFORMATION: The Advisory Board is established by section 3704b(c) of title 15 of the United States Code. The charter has been filed in accordance with the requirements of the Federal Advisory Committee Act, as

amended (5 U.S.C. app.). The Advisory Board reviews and makes recommendations to improve NTIS programs, operations, and general policies in support of NTIS' mission to advance Federal data priorities, promote economic growth, and enable operational excellence by providing innovative data services to Federal agencies through joint venture partnerships with the private sector.

The meeting is expected to include an update on key national efforts, including the U.S. General Service Administration's Open Government Secretariat's effort to develop the Sixth U.S. Open Government National Action Plan and the key role that Federal agencies, including NTIS, will play; followed by updates on the Agency's operations and activities. A final agenda and summary of the proceedings will be posted on the NTIS website as soon as they are available. (*https://www.ntis.gov/about/advisorybd/index.xhtml*).

The **Federal Register** Notification link to attain virtual access for the public to the FACA meeting will be provided on the NTIS website. Accordingly, persons wishing to gain virtual access should register for access no later than Monday, June 3, 2024. If there are sufficient expressions of interest, up to one-half hour will be reserved for public oral comments during the session. Speakers will be selected on a first-come, first-served basis. Each speaker will be limited to five minutes. Questions from the public will not be considered during this period.

Speakers who wish to expand upon their oral statements, those who had wished to speak but could not be accommodated on the agenda, and those who were unable to attend are invited to submit written statements by emailing Elizabeth Shaw or Steven Holland at the email address provided in the **FOR FURTHER INFORMATION CONTACT** section above.

Alicia Chambers,

NIST Executive Secretariat.

[FR Doc. 2024–07918 Filed 4–12–24; 8:45 am]

BILLING CODE 3510–04–P

CONSUMER PRODUCT SAFETY COMMISSION

Sunshine Act Meeting

TIME AND DATE: Wednesday, April 17, 2024—10:00 a.m.

PLACE: Room 420, Bethesda Towers, 4330 East-West Highway, Bethesda, MD.

STATUS: Commission Meeting—Closed to the Public.

MATTERS TO BE CONSIDERED:

Meeting Matter: Briefing Matter.

CONTACT PERSON FOR MORE INFORMATION: Alberta E. Mills, Office of the Secretary, U.S. Consumer Product Safety Commission, 4330 East-West Highway, Bethesda, MD 20814, 301–504–7479 (Office) or 240–863–8938 (Cell).

Dated: April 10, 2024.

Alberta Mills,

Commission Secretary.

[FR Doc. 2024–07979 Filed 4–11–24; 11:15 am]

BILLING CODE 6355–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

Combined Notice of Filings #1

Take notice that the Commission received the following electric corporate filings:

Docket Numbers: EC24–50–000.

Applicants: GC PGR Holdco, LLC, PGR Holdco, LLC, Healthcare of Ontario Pension Plan Trust Fund.

Description: Informational Report of Percentage of Issued and Outstanding Shares of PGR Holdco, LLC, et al.

Filed Date: 4/5/24.

Accession Number: 20240405–5270.

Comment Date: 5 p.m. ET 4/11/24.

Docket Numbers: EC24–68–000.

Applicants: Blue Harvest Solar Park LLC, Fern Solar LLC, Hecate Energy Desert Storage 1 LLC, Hecate Energy Johanna Facility LLC, Innovative Solar 42, LLC, Jicarilla Solar 1 LLC, Jicarilla Solar 2 LLC, Jicarilla Storage 1 LLC, Ortega Grid, LLC, San Jacinto Grid, LLC, Strauss Wind, LLC, Timber Road Solar Park LLC.

Description: Joint Application for Authorization Under Section 203 of the Federal Power Act of Blue Harvest Solar Park LLC, et al.

Filed Date: 4/8/24.

Accession Number: 20240408–5285.

Comment Date: 5 p.m. ET 4/29/24.

Take notice that the Commission received the following electric rate filings:

Docket Numbers: ER24–1179–001.

Applicants: Midcontinent Independent System Operator, Inc.

Description: Tariff Amendment: 2024–04–09_Deficiency Response to Att X, Appendix 6-Inverter Based Resources to be effective 4/2/2024.

Filed Date: 4/9/24.

Accession Number: 20240409–5090.

Comment Date: 5 p.m. ET 4/30/24.

Docket Numbers: ER24–1719–000.

Applicants: Xcel Energy Services Inc.

Description: Petition for Limited Waiver of Northern States Power Company.

Filed Date: 4/8/24.

Accession Number: 20240408–5279.

Comment Date: 5 p.m. ET 4/29/24.

Docket Numbers: ER24–1720–000.

Applicants: NorthWestern Corporation.

Description: Baseline eTariff Filing: New Baseline—Rate Schedules to be effective 4/9/2024.

Filed Date: 4/9/24.

Accession Number: 20240409–5073.

Comment Date: 5 p.m. ET 4/30/24.

Docket Numbers: ER24–1721–000.

Applicants: Tri-State Generation and Transmission Association, Inc.

Description: § 205(d) Rate Filing: Initial Filing of Rate Schedule FERC No. 368 to be effective 3/12/2024.

Filed Date: 4/9/24.

Accession Number: 20240409–5103.

Comment Date: 5 p.m. ET 4/30/24.

Docket Numbers: ER24–1722–000.

Applicants: Public Service Company of Colorado.

Description: § 205(d) Rate Filing: 2024–04–09 TSGT Fox Run Bndry Meter Agrmt Amnd 1—743–0.1.0. to be effective 6/9/2024.

Filed Date: 4/9/24.

Accession Number: 20240409–5115.

Comment Date: 5 p.m. ET 4/30/24.

Docket Numbers: ER24–1723–000.

Applicants: Puget Sound Energy, Inc.

Description: § 205(d) Rate Filing: Powerex P–T–P SA–5012 to be effective 4/1/2024.

Filed Date: 4/9/24.

Accession Number: 20240409–5171.

Comment Date: 5 p.m. ET 4/30/24.

The filings are accessible in the Commission's eLibrary system (*https://elibrary.ferc.gov/idmws/search/fercgensearch.asp*) by querying the docket number.

Any person desiring to intervene, to protest, or to answer a complaint in any of the above proceedings must file in accordance with Rules 211, 214, or 206 of the Commission's Regulations (18 CFR 385.211, 385.214, or 385.206) on or before 5:00 p.m. Eastern time on the specified comment date. Protests may be considered, but intervention is necessary to become a party to the proceeding.

eFiling is encouraged. More detailed information relating to filing requirements, interventions, protests, service, and qualifying facilities filings can be found at: *http://www.ferc.gov/docs-filing/efiling/filing-req.pdf.* For other information, call (866) 208–3676 (toll free). For TTY, call (202) 502–8659.

The Commission's Office of Public Participation (OPP) supports meaningful

public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502–6595 or *OPP@ferc.gov.*

Dated: April 9, 2024.

Debbie-Anne A. Reese,

Acting Secretary.

[FR Doc. 2024–07906 Filed 4–12–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. ER24–1718–000]

Switched On, LLC; Supplemental Notice That Initial Market-Based Rate Filing Includes Request for Blanket Section 204 Authorization

This is a supplemental notice in the above-referenced proceeding of Switched On, LLC's application for market-based rate authority, with an accompanying rate tariff, noting that such application includes a request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability.

Any person desiring to intervene or to protest should file with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Anyone filing a motion to intervene or protest must serve a copy of that document on the Applicant.

Notice is hereby given that the deadline for filing protests with regard to the applicant's request for blanket authorization, under 18 CFR part 34, of future issuances of securities and assumptions of liability, is April 29, 2024.

The Commission encourages electronic submission of protests and interventions in lieu of paper, using the FERC Online links at *http://www.ferc.gov.* To facilitate electronic service, persons with internet access who will eFile a document and/or be listed as a contact for an intervenor must create and validate an eRegistration account using the eRegistration link. Select the eFiling link to log on and submit the intervention or protests.

Persons unable to file electronically may mail similar pleadings to the Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426. Hand delivered submissions in docketed proceedings should be delivered to Health and Human Services, 12225 Wilkins Avenue, Rockville, Maryland 20852.

In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the internet through the Commission's Home Page (*http://www.ferc.gov*) using the ''eLibrary'' link. Enter the docket number excluding the last three digits in the docket number field to access the document. At this time, the Commission has suspended access to the Commission's Public Reference Room, due to the proclamation declaring a National Emergency concerning the Novel Coronavirus Disease (COVID–19), issued by the President on March 13, 2020. For assistance, contact the Federal Energy Regulatory Commission at *FERCOnlineSupport@ferc.gov* or call toll-free, (886) 208–3676 or TYY, (202) 502–8659.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502–6595 or *OPP@ferc.gov.*

Dated: April 9, 2024.

Debbie-Anne A. Reese,

Acting Secretary.

[FR Doc. 2024–07913 Filed 4–12–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. RM98–1–000]

Records Governing Off-the-Record Communications; Public Notice

This constitutes notice, in accordance with 18 CFR 385.2201(b), of the receipt of prohibited and exempt off-the-record communications.

Order No. 607 (64 FR 51222, September 22, 1999) requires Commission decisional employees, who make or receive a prohibited or exempt off-the-record communication relevant to the merits of a contested proceeding, to deliver to the Secretary of the Commission, a copy of the communication, if written, or a summary of the substance of any oral communication.

Prohibited communications are included in a public, non-decisional file associated with, but not a part of, the decisional record of the proceeding. Unless the Commission determines that the prohibited communication and any responses thereto should become a part of the decisional record, the prohibited off-the-record communication will not be considered by the Commission in reaching its decision. Parties to a proceeding may seek the opportunity to respond to any facts or contentions made in a prohibited off-the-record communication and may request that the Commission place the prohibited communication and responses thereto in the decisional record. The Commission will grant such a request only when it determines that fairness so requires. Any person identified below as having made a prohibited off-the-record communication shall serve the document on all parties listed on the official service list for the applicable proceeding in accordance with Rule 2010, 18 CFR 385.2010.

Exempt off-the-record communications are included in the decisional record of the proceeding, unless the communication was with a cooperating agency as described by 40 CFR 1501.6, made under 18 CFR 385.2201(e)(1)(v).

The following is a list of off-the-record communications recently received by the Secretary of the Commission. This filing may be viewed on the Commission's website at *http://www.ferc.gov* using the eLibrary link. Enter the docket number, excluding the last three digits, in the docket number field to access the document. For assistance, please contact FERC Online Support at *FERCOnlineSupport@ferc.gov* or toll free at (866) 208–3676, or for TTY, contact (202) 502–8659.

Docket Nos.	File date	Presenter or requester
Prohibited		
1. CP17–40–000, CP17–40–001, CP17–40–006	3–27–2024	FERC Staff.[1]
2. CP21–57–000, CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[2]
3. CP21–57–000, CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[3]
4. CP21–57–000 , CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[4]
5. CP21–57–000, CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[5]
6. CP21–57–000, CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[6]
7. CP21–57–000, CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[7]
8. CP21–57–000,CP16–10–000, CP19–477–000	4–3–2024	FERC Staff.[8]
Exempt		
P–14873–001	03/28/2024	FERC Staff.[9]

[1] Emailed comments from Nate Laps and 2 other individuals.
[2] Emailed comments from Sandra Hartzell and 29 other individuals.
[3] Emailed comments from Megan Ferguson and 29 other individuals.
[4] Emailed comments from Susan Lewitt and 29 other individuals.
[5] Emailed comments from Chris Thomas and 28 other individuals.
[6] Emailed comments from Brett Walter and 29 other individuals.
[7] Emailed comments from Kathryn Kassner and 13 other individuals.
[8] Emailed comments from Alan Peevers and 12 other individuals.
[9] Emailed comments dated 3/29/24 of New Koliganek Village Council.

Dated: April 9, 2024.

Debbie-Anne A. Reese,

Acting Secretary.

[FR Doc. 2024–07908 Filed 4–12–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. IC24–5–000]

Commission Information Collection Activities (FERC–725HH); Comment Request; Extension

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of information collection and request for comments.

SUMMARY: In compliance with the requirements of the Paperwork Reduction Act of 1995, the Federal Energy Regulatory Commission (Commission or FERC) is soliciting public comment on the currently approved information collection FERC–725HH (RF Reliability Standards).

DATES: Comments on the collection of information are due May 15, 2024.

ADDRESSES: Send written comments on FERC–725HH to OMB through *www.reginfo.gov/public/do/PRAMain.* Attention: Federal Energy Regulatory Commission Desk Officer. Please identify the OMB Control Number (1902–0256) in the subject line of your comments. Comments should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.*

Please submit copies of your comments to the Commission. You may submit copies of your comments (identified by Docket No. IC24–5–000) by one of the following methods:

Electronic filing through *https://www.ferc.gov,* is preferred.

- *Electronic Filing:* Documents must be filed in acceptable native applications and print-to-PDF, but not in scanned or picture format.
- For those unable to file electronically, comments may be filed by USPS mail or by hand (including courier) delivery.
  - *Mail via U.S. Postal Service Only:* Addressed to: Federal Energy Regulatory Commission, Secretary of the Commission, 888 First Street NE, Washington, DC 20426.
  - *Hand (including courier) delivery:* Deliver to: Federal Energy Regulatory Commission, Secretary of the Commission, 12225 Wilkins Avenue, Rockville, MD 20852.

Instructions: OMB submissions must be formatted and filed in accordance with submission guidelines at *www.reginfo.gov/public/do/PRAMain.* Using the search function under the ''Currently Under Review'' field, select Federal Energy Regulatory Commission; click ''submit,'' and select ''comment'' to the right of the subject collection.

FERC submissions must be formatted and filed in accordance with submission guidelines at: *https://www.ferc.gov.* For user assistance, contact FERC Online Support by email at *ferconlinesupport@ferc.gov,* or by phone at: (866) 208–3676 (toll-free).

Docket: Users interested in receiving automatic notification of activity in this docket or in viewing/downloading comments and issuances in this docket may do so at *http://www.ferc.gov/docs-filing/docs-filing.asp.*

FOR FURTHER INFORMATION CONTACT: Jean Sonneman may be reached by email at *DataClearance@FERC.gov,* and telephone at (202) 502–6362.

SUPPLEMENTARY INFORMATION:

Title: FERC–725HH, RF Reliability Standards.

OMB Control No.: 1902–0256.

Type of Request: Three-year renewal of FERC–725HH.

Abstract: This collection of information pertains to the Commission's compliance with section 215 of the Federal Power Act (FPA) (16 U.S.C. 824*o*), which enables the Commission to strengthen the reliability of the ''bulk-power system.'' [1] The Commission's implementation of FPA section 215 involves review and approval of a system of mandatory Reliability Standards that are established and enforced by an ''Electric Reliability Organization'' (ERO).[2] The Commission has certified the North American Electric Reliability Corporation (NERC) as the ERO.[3]

[1] FPA section 251(a)(1) defines ''bulk-power system'' as follows: ''(A) facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof); and (B) electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.''

[2] FPA section 215(a)(2) defines ''Electric Reliability Organization'' as ''the organization certified by the Commission under subsection (c) the purpose of which is to establish and enforce reliability standards for the bulk-power system, subject to Commission review.''

[3] *North American Electric Reliability Corp.,* 116 FERC ¶ 61,062 (ERO Certification Order), *order on*

Reliability Standards that the ERO proposes to the Commission may include Reliability Standards that are proposed to the ERO by a Regional Entity.[4] A Regional Entity is an entity that has been approved by the Commission to enforce Reliability Standards under delegated authority from the ERO.[5] On March 17, 2011, the Commission approved a regional Reliability Standard submitted by the ERO that was developed by the Reliability First Corporation (RF).[6]

RF promotes bulk electric system reliability in the Eastern Interconnection. RF is the Regional Entity responsible for compliance monitoring and enforcement in the RF region. In addition, RF provides an environment for the development of Reliability Standards and the coordination of the operating and planning activities of its members as set forth in the RF bylaws.

There is one regional Reliability Standard in the RF region. The Commission requests renewal of OMB clearance for that regional Reliability Standard, known as BAL–502–RF–03 (Planning Resource Adequacy Analysis, Assessment and Documentation).

Type of Respondents: Planning coordinators.

Estimate of Annual Burden:[7] The estimated burden and cost[8] are as follows:

FERC–725HH, RF Reliability Standards

Entity	Number of respondents[9]	Annual number of responses per respondent	Annual number of responses	Average burden hrs. & cost per response ($)	Total annual burden hours & total annual cost ($)	Cost per respondent ($)
	(1)	(2)	(1) * (2) = (3)	(4)	(3) * (4) = (5)	(5) ÷ (1) = (6)
Regional Reliability Standard BAL–502–RF–03						
Planning Coordinators	2	1	2	16 hrs.; $1,085.92	32 hrs.; $2,171.84	$1,085.92

Comments: Comments are invited on: (1) whether the collection of information is necessary for the proper performance of the functions of the Commission, including whether the information will have practical utility; (2) the accuracy of the agency's estimate of the burden and cost of the collection of information, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information collection; and (4) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

Dated: April 9, 2024.

Debbie-Anne A. Reese,

Acting Secretary.

[FR Doc. 2024–07907 Filed 4–12–24; 8:45 am]

BILLING CODE 6717–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP24–113–000]

Eastern Gas Transmission and Storage, Inc.; Notice of Request Under Blanket Authorization and Establishing Intervention and Protest Deadline

Take notice that on April 1, 2024, Eastern Gas Transmission and Storage, Inc. (EGTS), 10700 Energy Way, Glen Allen, Virginia 23060, filed in the above referenced docket, a prior notice request pursuant to sections 157.205 and 157.210 of the Commission's regulations under the Natural Gas Act (NGA) and EGTS' blanket certificate issued in Docket No. CP82–537–000 for authorization to install certain facilities in Greene County, Pennsylvania; Marshall County, West Virginia; and Monroe County, Ohio (Heartland Extension Project). EGTS proposes to install a 7,700 horsepower gas-fired, turbine-driven compressor unit at its Crayne Compressor Station and install additional upgrades at its Mullett, Burch Ridge, and Mockingbird Hill Compressor Stations. The Heartland Extension Project is fully subscribed and will deliver 60,000 dekatherms per day of firm transportation service to an existing interconnection with Rockies Express Pipeline LLC in Clarington, Ohio. EGTS estimates the cost of the project to be $34,380,000, all as more fully set forth in the request which is on file with the Commission and open to public inspection.

In addition to publishing the full text of this document in the **Federal Register**, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the internet through the Commission's Home Page (*http://www.ferc.gov*). From the Commission's Home Page on the internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

User assistance is available for eLibrary and the Commission's website during normal business hours from FERC Online Support at (202) 502–6652 (toll free at 1–866–208–3676) or email at *ferconlinesupport@ferc.gov,* or the Public Reference Room at (202) 502–

reh'g & compliance, 117 FERC ¶ 61,126 (2006), *aff'd sub nom. Alcoa, Inc.* v. *FERC,* 564 F.3d 1342 (D.C. Cir. 2009).

[4] 16 U.S.C. 824*o*(e)(4).

[5] 16 U.S.C. 824*o*(a)(7) and (e)(4).

[6] *Planning Resource Adequacy Assessment Reliability Standard,* Order No. 747, 134 FERC ¶ 61,212 (2011).

[7] Burden is defined as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, refer to 5 CFR 1320.3.

[8] For BAL–502–RF–03, the estimated hourly cost (salary plus benefits) is a combination based on the Bureau of Labor Statistics (BLS), as of 2022, for 75% of the average of an Electrical Engineer (17–2071) $77.29/hr, 77.29 × .75 = 57.9675 ($57.97—rounded) ($57.97/hour) and 25% of an Information and Record Clerk (43–4199) $39.58/hr, $39.58 × .25% = 9.895 ($9.90 rounded) ($9.90/hour), for a total ($57.97 + $9.90 = $67.87/hour).

[9] The number of respondents is derived from the NERC Compliance Registry as of November 14, 2023 for the burden associated with the regional Reliability Standard BAL–502–RF–03.

8371, TTY (202) 502–8659. Email the Public Reference Room at *public.referenceroom@ferc.gov.*

Any questions concerning this request should be directed to James Scribner, Regulatory Analyst, Eastern Gas Transmission and Storage, Inc., 10700 Energy Way, Glen Allen, Virginia 23060, by phone at (804) 397–5113 or by email at *James.Scribner@bhegts.com.*

Public Participation

There are three ways to become involved in the Commission's review of this project: you can file a protest to the project, you can file a motion to intervene in the proceeding, and you can file comments on the project. There is no fee or cost for filing protests, motions to intervene, or comments. The deadline for filing protests, motions to intervene, and comments is 5:00 p.m. Eastern Time on June 10, 2024. How to file protests, motions to intervene, and comments is explained below.

The Commission's Office of Public Participation (OPP) supports meaningful public engagement and participation in Commission proceedings. OPP can help members of the public, including landowners, environmental justice communities, Tribal members and others, access publicly available information and navigate Commission processes. For public inquiries and assistance with making filings such as interventions, comments, or requests for rehearing, the public is encouraged to contact OPP at (202) 502–6595 or *OPP@ferc.gov.*

Protests

Pursuant to section 157.205 of the Commission's regulations under the NGA,[1] any person [2] or the Commission's staff may file a protest to the request. If no protest is filed within the time allowed or if a protest is filed and then withdrawn within 30 days after the allowed time for filing a protest, the proposed activity shall be deemed to be authorized effective the day after the time allowed for protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request for authorization will be considered by the Commission.

Protests must comply with the requirements specified in section 157.205(e) of the Commission's regulations,[3] and must be submitted by the protest deadline, which is June 10, 2024. A protest may also serve as a motion to intervene so long as the protestor states it also seeks to be an intervenor.

Interventions

Any person has the option to file a motion to intervene in this proceeding. Only intervenors have the right to request rehearing of Commission orders issued in this proceeding and to subsequently challenge the Commission's orders in the U.S. Circuit Courts of Appeal.

To intervene, you must submit a motion to intervene to the Commission in accordance with Rule 214 of the Commission's Rules of Practice and Procedure [4] and the regulations under the NGA [5] by the intervention deadline for the project, which is June 10, 2024. As described further in Rule 214, your motion to intervene must state, to the extent known, your position regarding the proceeding, as well as your interest in the proceeding. For an individual, this could include your status as a landowner, ratepayer, resident of an impacted community, or recreationist. You do not need to have property directly impacted by the project in order to intervene. For more information about motions to intervene, refer to the FERC website at *https://www.ferc.gov/resources/guides/how-to/intervene.asp.*

All timely, unopposed motions to intervene are automatically granted by operation of Rule 214(c)(1). Motions to intervene that are filed after the intervention deadline are untimely and may be denied. Any late-filed motion to intervene must show good cause for being late and must explain why the time limitation should be waived and provide justification by reference to factors set forth in Rule 214(d) of the Commission's Rules and Regulations. A person obtaining party status will be placed on the service list maintained by the Secretary of the Commission and will receive copies (paper or electronic) of all documents filed by the applicant and by all other parties.

Comments

Any person wishing to comment on the project may do so. The Commission considers all comments received about the project in determining the appropriate action to be taken. To ensure that your comments are timely and properly recorded, please submit your comments on or before June 10, 2024. The filing of a comment alone will not serve to make the filer a party to the proceeding. To become a party, you must intervene in the proceeding.

How To File Protests, Interventions, and Comments

There are two ways to submit protests, motions to intervene, and comments. In both instances, please reference the Project docket number CP24–113–000 in your submission.

(1) You may file your protest, motion to intervene, and comments by using the Commission's eFiling feature, which is located on the Commission's website (*www.ferc.gov)* under the link to Documents and Filings. New eFiling users must first create an account by clicking on ''eRegister.'' You will be asked to select the type of filing you are making; first select ''General'' and then select ''Protest'', ''Intervention'', or ''Comment on a Filing''; or [6]

(2) You can file a paper copy of your submission by mailing it to the address below. Your submission must reference the Project docket number CP24–113–000.

To file via USPS: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 888 First Street NE, Washington, DC 20426

To file via any other method: Debbie-Anne A. Reese, Acting Secretary, Federal Energy Regulatory Commission, 12225 Wilkins Avenue, Rockville, Maryland 20852

The Commission encourages electronic filing of submissions (option 1 above) and has eFiling staff available to assist you at (202) 502–8258 or *FercOnlineSupport@ferc.gov.*

Protests and motions to intervene must be served on the applicant either by mail or email (with a link to the document) at: James Scribner, Regulatory Analyst, Eastern Gas Transmission and Storage, Inc., 10700 Energy Way, Glen Allen, Virginia 23060 or by email at *James.Scribner@bhegts.com.* Any subsequent submissions by an intervenor must be served on the applicant and all other parties to the proceeding. Contact information for parties can be downloaded from the service list at the eService link on FERC Online.

Tracking the Proceeding

Throughout the proceeding, additional information about the project will be available from the Commission's Office of External Affairs, at (866) 208–FERC, or on the FERC website at *www.ferc.gov* using the ''eLibrary'' link

[1] 18 CFR 157.205.

[2] Persons include individuals, organizations, businesses, municipalities, and other entities. 18 CFR 385.102(d).

[3] 18 CFR 157.205(e).

[4] 18 CFR 385.214.

[5] 18 CFR 157.10.

[6] Additionally, you may file your comments electronically by using the eComment feature, which is located on the Commission's website at *www.ferc.gov* under the link to Documents and Filings. Using eComment is an easy method for interested persons to submit brief, text-only comments on a project.

as described above. The eLibrary link also provides access to the texts of all formal documents issued by the Commission, such as orders, notices, and rulemakings.

In addition, the Commission offers a free service called eSubscription which allows you to keep track of all formal issuances and submittals in specific dockets. This can reduce the amount of time you spend researching proceedings by automatically providing you with notification of these filings, document summaries, and direct links to the documents. For more information and to register, go to *www.ferc.gov/docs-filing/esubscription.asp.*

Dated: April 9, 2024.

Debbie-Anne A. Reese,

Acting Secretary.

[FR Doc. 2024–07914 Filed 4–12–24; 8:45 am]

BILLING CODE 6717–01–P

ENVIRONMENTAL PROTECTION AGENCY

[FRL OP–OFA–117]

Notice of Adoption of a Fish and Wildlife Service Categorical Exclusion Under the National Environmental Policy Act

AGENCY: Environmental Protection Agency.

ACTION: Notice of adoption of categorical exclusion.

SUMMARY: The Environmental Protection Agency (EPA) is adopting a Fish and Wildlife Service's (FWS) categorical exclusion (CE) for restoration activities of wetland, riparian, instream, and native habitats under the National Environmental Policy Act (NEPA) to use in certain EPA water grants and loan programs administered by EPA. This notice describes the categories of proposed actions for which EPA intends to use FWS's CE and describes the consultation between the agencies.

DATES: This action is effective upon publication.

FOR FURTHER INFORMATION CONTACT: Julia Thorp, Community Grants Program, by phone at 202–565–2238, or by email at *thorp.julia@epa.gov,* or Alaina McCurdy, WIFIA, by phone at 202–565–5795, or by email at *mccurdy.alaina@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

NEPA and CEs

The National Environmental Policy Act, as amended at, 42 U.S.C. 4321–4347 (NEPA), requires all Federal agencies to assess the environmental impact of their actions. Congress enacted NEPA in order to encourage productive and enjoyable harmony between humans and the environment, recognizing the profound impact of human activity and the critical importance of restoring and maintaining environmental quality to the overall welfare of humankind. 42 U.S.C. 4321, 4331. NEPA's twin aims are to ensure agencies consider the environmental effects of their proposed actions in their decision-making processes and inform and involve the public in that process. 42 U.S.C. 4331. NEPA created the Council on Environmental Quality (CEQ), which promulgated NEPA implementing regulations, 40 CFR parts 1500 through 1508 (CEQ regulations).

To comply with NEPA, agencies determine the appropriate level of review—an environmental impact statement (EIS), environmental assessment (EA), or CE. 42 U.S.C. 4336. If a proposed action is likely to have significant environmental effects, the agency must prepare an EIS and document its decision in a record of decision. 42 U.S.C. 4336. If the proposed action is not likely to have significant environmental effects or the effects are unknown, the agency may instead prepare an EA, which involves a more concise analysis and process than an EIS. 42 U.S.C. 4336. Following the EA, the agency may conclude the process with a finding of no significant impact if the analysis shows that the action will have no significant effects. If the analysis in the EA finds that the action is likely to have significant effects, however, then an EIS is required.

Under NEPA and the CEQ regulations, a Federal agency also can establish CEs—categories of actions that the agency has determined normally do not significantly affect the quality of the human environment—in their agency NEPA procedures. 42 U.S.C. 4336(e)(1); 40 CFR 1501.4, 1507.3(e)(2)(ii), 1508.1(d). If an agency determines that a CE covers a proposed action, it then evaluates the proposed action for extraordinary circumstances in which a normally excluded action may have a significant effect. 40 CFR 1501.4(b). If no extraordinary circumstances are present or if further analysis determines that the extraordinary circumstances do not involve the potential for significant environmental effects, the agency may apply the CE to the proposed action without preparing an EA or EIS. 42 U.S.C. 4336(a)(2), 40 CFR 1501.4. If the extraordinary circumstances have the potential to result in significant effects, the agency is required to prepare an EA or EIS.

Section 109 of NEPA, enacted as part of the Fiscal Responsibility Act of 2023, allows a Federal agency to ''adopt'' and use another agency's CEs for a category of proposed agency actions. 42 U.S.C. 4336(c). To use another agency's CEs under section 109, the adopting agency must identify the relevant CEs listed in another agency's (''establishing agency'') NEPA procedures that cover the adopting agency's category of proposed actions or related actions; consult with the establishing agency to ensure that the proposed adoption of the CE to a category of actions is appropriate; identify to the public the CE that the adopting agency plans to use for its proposed actions; and document adoption of the CE. *Id.* This notice describes EPA's adoption of FWS's CE under section 109 of NEPA to use in EPA's program and funding opportunities administered by EPA.

EPA's Programs

EPA intends to use the FWS's CE for its restoration activities under two programs, the Community Grants Program and the Water Infrastructure Finance and Innovation Act (WIFIA) Program. EPA's Community Grants Program funds projects for drinking water, wastewater, stormwater infrastructure, and water quality protection projects, which may include restoration projects of wetland, riparian, instream, or native habitats. For the Community Grants Program, Congress appropriates resources for specifically named water infrastructure projects identified as Congressionally Directed Spending and Community Project Funding items in Appropriations Acts.

EPA's WIFIA Program provides credit assistance (also referred to as direct loans or loan guarantees) for a range of drinking water and wastewater infrastructure projects. Eligible activities include habitat protection and restoration projects, such as shoreline activities, instream activities, water quality improvements, control of invasive vegetative and aquatic species, and fish and wildlife habitat conservation efforts.

Both Community Grants and WIFIA Program activities may involve the construction of new or upgrades to existing small structures or improvements, such as water control structures, berms, and dikes, for the restoration of wetland, riparian, instream, or native habitats, and may include revegetation actions, such as the planting of native species. These types of restoration activities typically result

in no or minor adverse effects on the environment.

II. FWS Categorical Exclusions

EPA is adopting the FWS CE for restoration activities of wetland, riparian, instream, and native habitats. EPA has identified the following FWS CE listed in the Department of the Interior's (DOI) Departmental Manual (516 DM 8.5(B)(3)).

516 DM 8.5(B)(3)

B. Resource Management.

(3) The construction of new, or the addition of, small structures or improvements, including structures and improvements for the restoration of wetland, riparian, instream, or native habitats, which result in no or only minor changes in the use of the affected local area. The following are examples of activities that may be included.

(a) The installation of fences.

(b) The construction of small water control structures.

(c) The planting of seeds or seedlings and other minor revegetation actions.

(d) The construction of small berms or dikes.

(e) The development of limited access for routine maintenance and management purposes.

EPA intends to apply this categorical exclusion to restoration projects administered by the EPA Community Grants Program and WIFIA Program. EPA will consider each proposal for restoration activities to ensure that the proposal is within the scope of the CE. In addition, EPA will coordinate with affected Federal agencies, states, Tribal, and local governments prior to carrying out restoration activities, as appropriate.

III. Consultation With FWS and Determination of Appropriateness

EPA consulted with FWS on the appropriateness of EPA's adoption of the CE in November 2023. EPA and FWS's consultation included a review of FWS's experience developing and applying the CE, as well as the types of actions for which EPA plans to utilize the CE. The EPA actions under the Community Grants and WIFIA Programs are very similar to the type of projects for which FWS has applied the CE and therefore the effects of EPA projects will be very similar to the effects of FWS projects, which are not significant, absent extraordinary circumstances. Therefore, EPA has determined that its proposed use of FWS's CE as described in this notice is appropriate.

IV. Consideration of Extraordinary Circumstances

When applying this CE, EPA will evaluate whether the proposed action has the potential to result in significant effects by reviewing both DOI's extraordinary circumstances list found at 43 CFR 46.215 and EPA's list of extraordinary circumstances found at 40 CFR 6.204(b).

V. Notice to the Public and Documentation of Adoption

This notice serves to identify to the public and document EPA's adoption of FWS's CE (516 DM 8.5(B)(3)) for restoration activities. This notice identifies the types of actions to which EPA will apply the CE, as well as the considerations that EPA will use in determining whether an action is within the scope of the CE for restoration activities.

Andrew D. Sawyers,

Director, Office of Wastewater Management.

[FR Doc. 2024–07894 Filed 4–12–24; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

[EPA–HQ–OPPT–2024–0057; FRL–11683–03–OCSPP]

Certain New Chemicals; Receipt and Status Information for March 2024

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA is required under the Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act, to make information publicly available and to publish information in the **Federal Register** pertaining to submissions under TSCA section 5, including notice of receipt of a Premanufacture notice (PMN), Significant New Use Notice (SNUN) or Microbial Commercial Activity Notice (MCAN), including an amended notice or test information; an exemption application (Biotech exemption); an application for a test marketing exemption (TME), both pending and/or concluded; a notice of commencement (NOC) of manufacture (including import) for new chemical substances; and a periodic status report on new chemical substances that are currently under EPA review or have recently concluded review. This document covers the period from 3/01/2024 to 3/31/2024.

DATES: Comments identified by the specific case number provided in this document must be received on or before May 15, 2024.

ADDRESSES: Submit your comments, identified by docket identification (ID) number EPA–HQ–OPPT–2024–0057, through the *Federal eRulemaking Portal* at *https://www.regulations.gov.* Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Additional instructions on commenting and visiting the docket, along with more information about dockets generally, is available at *https://www.epa.gov/dockets.*

FOR FURTHER INFORMATION CONTACT: *For technical information contact:* Jim Rahai, Project Management and Operations Division (MC 7407M), Office of Pollution Prevention and Toxics, Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, DC 20460–0001; telephone number: (202) 564–8593; email address: *rahai.jim@epa.gov.*

For general information contact: The TSCA-Hotline, ABVI-Goodwill, 422 South Clinton Ave., Rochester, NY 14620; telephone number: (202) 554–1404; email address: *TSCA-Hotline@epa.gov.*

SUPPLEMENTARY INFORMATION:

I. Executive Summary

A. What action is the Agency taking?

This document provides the receipt and status reports for the period from 3/01/2024 to 3/31/2024. The Agency is providing notice of receipt of PMNs, SNUNs, and MCANs (including amended notices and test information); an exemption application under 40 CFR part 725 (Biotech exemption); TMEs, both pending and/or concluded; NOCs to manufacture a new chemical substance; and a periodic status report on new chemical substances that are currently under EPA review or have recently concluded review.

EPA is also providing information on its website about cases reviewed under the amended TSCA, including the section 5 PMN/SNUN/MCAN and exemption notices received, the date of receipt, the final EPA determination on the notice, and the effective date of EPA's determination for PMN/SNUN/MCAN notices on its website at: *https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/status-pre-manufacture-notices.* This information is updated on a weekly basis.

B. What is the Agency's authority for taking this action?

Under the Toxic Substances Control Act (TSCA), 15 U.S.C. 2601 *et seq.,* a

chemical substance may be either an ''existing'' chemical substance or a ''new'' chemical substance. Any chemical substance that is not on EPA's TSCA Inventory of Chemical Substances (TSCA Inventory) is classified as a ''new chemical substance,'' while a chemical substance that is listed on the TSCA Inventory is classified as an ''existing chemical substance.'' (See TSCA section 3(11).) For more information about the TSCA Inventory please go to: *https://www.epa.gov/tsca-inventory.*

Any person who intends to manufacture (including import) a new chemical substance for a non-exempt commercial purpose, or to manufacture or process a chemical substance in a non-exempt manner for a use that EPA has determined is a significant new use, is required by TSCA section 5 to provide EPA with a PMN, MCAN, or SNUN, as appropriate, before initiating the activity. EPA will review the notice, make a risk determination on the chemical substance or significant new use, and take appropriate action as described in TSCA section 5(a)(3).

TSCA section 5(h)(1) authorizes EPA to allow persons, upon application and under appropriate restrictions, to manufacture or process a new chemical substance, or a chemical substance subject to a significant new use rule (SNUR) issued under TSCA section 5(a)(2), for ''test marketing'' purposes, upon a showing that the manufacture, processing, distribution in commerce, use, and disposal of the chemical will not present an unreasonable risk of injury to health or the environment. This is referred to as a test marketing exemption, or TME. For more information about the requirements applicable to a new chemical go to: *https://www.epa.gov/chemicals-under-tsca.*

Under TSCA sections 5 and 8 and EPA regulations, EPA is required to publish in the **Federal Register** certain information, including notice of receipt of a PMN/SNUN/MCAN (including amended notices and test information); an exemption application under 40 CFR part 725 (biotech exemption); an application for a TME, both pending and concluded; NOCs to manufacture a new chemical substance; and a periodic status report on the new chemical substances that are currently under EPA review or have recently concluded review.

C. Does this action apply to me?

This action provides information that is directed to the public in general.

D. Does this action have any incremental economic impacts or paperwork burdens?

No.

E. What should I consider as I prepare my comments for EPA?

1. *Submitting confidential business information (CBI).* Do not submit this information to EPA through regulations.gov or email. Clearly mark the part or all of the information that you claim to be CBI. For CBI information in a disk or CD–ROM that you mail to EPA, mark the outside of the disk or CD–ROM as CBI and then identify electronically within the disk or CD–ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, a copy of the comment that does not contain the information claimed as CBI must be submitted for inclusion in the public docket. Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR part 2.

2. *Tips for preparing your comments.* When preparing and submitting your comments, see the commenting tips at *https://www.epa.gov/dockets/commenting-epa-dockets.*

II. Status Reports

In the past, EPA has published individual notices reflecting the status of TSCA section 5 filings received, pending, or concluded. In 1995, the Agency modified its approach and streamlined the information published in the **Federal Register** after providing notice of such changes to the public and an opportunity to comment (see the **Federal Register** of May 12, 1995 (60 FR 25798) (FRL–4942–7)). Since the passage of the Lautenberg amendments to TSCA in 2016, public interest in information on the status of section 5 cases under EPA review and, in particular, the final determination of such cases, has increased. In an effort to be responsive to the regulated community, the users of this information, and the general public, to comply with the requirements of TSCA, to conserve EPA resources and to streamline the process and make it more timely, EPA is providing information on its website about cases reviewed under the amended TSCA, including the section 5 PMN/SNUN/MCAN and exemption notices received, the date of receipt, the final EPA determination on the notice, and the effective date of EPA's determination for PMN/SNUN/MCAN notices on its website at: *https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/status-pre-manufacture-notices.* This information is updated on a weekly basis.

III. Receipt Reports

For the PMN/SNUN/MCANs that have passed an initial screening by EPA during this period, Table I provides the following information (to the extent that such information is not subject to a CBI claim) on the notices screened by EPA during this period: The EPA case number assigned to the notice that indicates whether the submission is an initial submission, or an amendment, a notation of which version was received, the date the notice was received by EPA, the submitting manufacturer (*i.e.,* domestic producer or importer), the potential uses identified by the manufacturer in the notice, and the chemical substance identity.

As used in each of the tables in this unit, (S) indicates that the information in the table is the specific information provided by the submitter, and (G) indicates that this information in the table is generic information because the specific information provided by the submitter was claimed as CBI. Submissions which are initial submissions will not have a letter following the case number. Submissions which are amendments to previous submissions will have a case number followed by the letter ''A'' (*e.g.,* P–18–1234A). The version column designates submissions in sequence as ''1'', ''2'', ''3'', etc. Note that in some cases, an initial submission is not numbered as version 1; this is because earlier version(s) were rejected as incomplete or invalid submissions. Note also that future versions of the following tables may adjust slightly as the Agency works to automate population of the data in the tables.

TABLE I—PMN/SNUN/MCANS APPROVED * FROM 3/01/2024 TO 3/31/2024

Case No.	Version	Received date	Manufacturer	Use	Chemical substance
J–24–0009A	3	03/05/2024	CBI	(G) Chemical production	(G) Chromosomally modified Saccharomyces cerevisiae.

TABLE I—PMN/SNUN/MCANS APPROVED * FROM 3/01/2024 TO 3/31/2024—Continued

Case No.	Version	Received date	Manufacturer	Use	Chemical substance
J–24–0010A	3	03/05/2024	CBI	(G) Chemical production	(G) Chromosomally modified Saccharomyces cerevisiae.
J–24–0011A	3	03/05/2024	CBI	(G) Chemical production	(G) Chromosomally modified Saccharomyces cerevisiae.
J–24–0012A	3	03/05/2024	CBI	(G) Chemical production	(G) Chromosomally modified Saccharomyces cerevisiae strain.
J–24–0013A	3	03/05/2024	CBI	(G) Chemical production	(G) Chromosomally modified Saccharomyces cerevisiae.
P–18–0065A	3	03/14/2024	Evonik Corporation.	(S) Absorption agent, lab reagent.	(S) 1,3-Propanediamine, N1,N1-dimethyl-N3-(2,2,6,6-tetramethyl-4-piperidinyl)-.
P–22–0014A	6	03/18/2024	Colonial Chemical, Inc.	(G) Precursor	(G) sodium bis(chloropropanediol) phosphate.
P–22–0157A	6	03/25/2024	Evonik Corporation.	(S) Polyurethane catalyst	(S) 1,2-Ethanediamine, N1,N2-dimethyl-N1-(1-methylethyl)-N2-[2-[methyl(1-methylethyl)amino]ethyl]-.
P–22–0176A	4	03/14/2024	Colonial Chemical, Inc.	(G) Corrosion inhibitor	(G) 6-[(alkyl-1-oxohexyl)amino]-hexanoic acid, compd. with 2,2′,2″-nitrilotris[ethanol] (1:1).
P–23–0086A	6	03/04/2024	CBI	(G) Additive for surfactant performance enhancement.	(S) 1,2-Benzisothiazole, 3-methyl-,1,1-dioxide.
P–23–0096	4	03/08/2024	CBI	(G) Open, non-dispersive use, additive for packaging industry.	(S) Rosin, fumarated, polymer with adipic acid and glycerol.
P–23–0174A	3	03/08/2024	CBI	(G) Component used in battery manufacturing.	(G) Mixed metal oxide.
P–23–0174A	4	03/18/2024	CBI	(G) Component used in battery manufacturing.	(G) Mixed metal oxide.
P–23–0174A	5	03/20/2024	CBI	(G) Component used in battery manufacturing.	(G) Mixed metal oxide.
P–24–0025	1	11/09/2023	CBI	(G) Paving chemical additive.	(G) Functionalized fatty acids, reaction products with alkene polyamines, hydrochlorides.
P–24–0038	1	12/13/2023	CBI	(G) Ingredient for consumer products.	(S) Bicyclo(2.2.1)hept-5-en-2-ol,acetate.
P–24–0062	1	01/11/2024	Flint Hills Resources.	(S) Raw material in Emulsified Asphalt Production.	(G) Fatty acids, reaction products with alkene polyamine, hydrochlorides.
P–24–0063	1	01/11/2024	Flint Hills Resources.	(S) Raw material in Emulsified Asphalt Production.	(G) Fatty acids, reaction products with alkene polyamine, hydrochlorides.
P–24–0064	1	01/11/2024	Flint Hills Resources.	(S) Raw material in Emulsified Asphalt Production.	(G) Fatty acids, reaction products with alkene polyamine, hydrochlorides.
P–24–0065	1	01/11/2024	Flint Hills Resources.	(S) Raw material in Emulsified Asphalt Production.	(G) Fatty acids, reaction products with alkene polyamine, hydrochlorides.
P–24–0068	1	01/16/2024	Flint Hills Resources.	(S) Raw material in Emulsified Asphalt Production.	(G) Functionalized fatty acids, reaction products with alkene polyamines, hydrochlorides.
P–24–0080	2	03/19/2024	Seppic	(S) Function: Non-ionic surfactant for industrial uses and bio manufacturing process.. Applications: HI &I Plant protection products; fire-fighting foam; Detergents; oilfield; paper and textile.	(S) D-glucoside, undecyl.
P–24–0081	2	02/29/2024	CBI	(G) Adhesive binder	(S) Heptyl 2-cyanoacrylate.
P–24–0081A	3	03/18/2024	CBI	(G) Adhesive binder	(S) Heptyl 2-cyanoacrylate.
P–24–0088A	2	03/27/2024	HSAGP Energy, LLC.	(G) Substance for use in the manufacture of battery components.	(G) Mixed metal oxide.
P–24–0089	1	03/05/2024	CBI	(S) Additive for electrochemical cell manufacturing.	(S) 1H -Imidazole-4,5-dicarbonitrile, 2-(trifluoromethyl)-, lithium salt (1:1).
P–24–0090	1	03/05/2024	AlzChem, LLC	(S) Manure additive	(S) Glycine, N-(aminoiminomethyl)-, manuf. of, by-products from.
P–24–0092	1	03/05/2024	Colonial Chemical, Inc.	(G) Used in personal care products.	(G) Fatty acid reaction products with diisopropanolamine.

TABLE I—PMN/SNUN/MCANS APPROVED * FROM 3/01/2024 TO 3/31/2024—Continued

Case No.	Version	Received date	Manufacturer	Use	Chemical substance
P–24–0093	1	03/08/2024	Evonik Corporation.	(S) Surfactant in laundry detergent, hard surface cleaner, manual/hand dish detergent.	(G) Rhamnolipids, modified pseudomonas-fermented, from dextrose, salts.
P–24–0094	1	03/08/2024	Evonik Corporation.	(S) Surfactant in laundry detergent, hard surface cleaner, manual/hand dish detergent.	(G) Rhamnolipids, modified pseudomonas-fermented, from dextrose, salts.
P–24–0095	1	03/08/2024	Evonik Corporation.	(S) Surfactant in laundry detergent, hard surface cleaner, manual/hand dish detergent.	(G) Rhamnolipids, modified pseudomonas-fermented, from dextrose, salts.
P–24–0096	1	03/08/2024	Evonik Corporation.	(S) Surfactant in laundry detergent, hard surface cleaner, manual/hand dish detergent.	(G) Rhamnolipids, modified pseduomonas-fermented, from dextrose, salts.
P–24–0097	1	03/08/2024	CBI	(G) Contained use for microlithography for electronic device manufacturing.	(G) Sulfonium, tris(4-fluorophenyl)-, (substituted phenoxy)alkyl substitutedbenzoate (1:1).
P–24–0098	2	03/18/2024	CBI	(G) Contained use for microlithography for electronic device manufacturing.	(G) Substituted heterocyclic onium compound, salt with fluoropoly. Substituted alkyl. Substituted tricycloalkane carboxylate (1:1), polymer with 4-ethenyl-2-methoxylphenol and fluoro. Substituted aromaticalkyl 2-methyl-2-propenoate, di-Me 2,2′-(1,2-diazenediyl)bis[2-methylpropanoate]-initiated.
P–24–0099	1	03/14/2024	CBI	(G) Printing additive	(G) Saturated and unsaturated hydrocarbon waxes, oxidized, polymers with alkenoic acid, alkanedioic acid, substituted carbomonocycle, alkyl alkenoate, alkenyl substituted heteromonocycle, alkylene glycol, alkyl alkenoate, alkenedioic acid, polyalkylene glycol ether with substituted carbomonocycle (alkylidene)bis-, polyalkylene glycol ether with substituted carbomonocycle (alkylidene)bis-, alkanoic acid, alkyl alkenoate, disubstituted carbomonocycle, substituted heteropolycycle, alkyl peroxide-initiated.
P–24–0100	1	03/13/2024	CBI	(G) Wetting agent	(G) sulfonyl carbamate of propoxylated alkyl alcohol.
P–24–0101	1	03/13/2024	CBI	(G) Wetting agent	(G) sulfonyl carbamate of ethoxy/propoxylated alkyl alcohol ethoxy.
P–24–0102	2	03/26/2024	H.B. Fuller Company.	(S) Industrial Adhesive	(G) Polyester polymer with polyether polymer and 1,1′-methylenebis[4-isocyanatobenzene].
P–24–0103	2	03/26/2024	H.B. Fuller Company.	(S) Industrial Adhesive	(G) Polyester polymer with polyether polymer and 1,1′-methylenebis[isocyanatobenzene].

In Table II of this unit, EPA provides the following information (to the extent that such information is not claimed as CBI) on the NOCs that have passed an initial screening by EPA during this period: The EPA case number assigned to the NOC including whether the submission was an initial or amended submission, the date the NOC was received by EPA, the date of commencement provided by the submitter in the NOC, a notation of the type of amendment (*e.g.,* amendment to generic name, specific name, technical contact information, etc.) and chemical substance identity.

TABLE II—NOCS APPROVED * FROM 3/01/2024 TO 3/31/2024

Case No.	Received date	Commencement date	If amendment, type of amendment	Chemical substance
J–23–0005 ..	03/27/2024	03/22/2024	N	(G) Microorganisms transformed to express an enzyme.
J–24–0001 ..	03/20/2024	03/08/2024	N	(G) Chromosomally modified saccharomyces cerevisiae.

TABLE II—NOCS APPROVED * FROM 3/01/2024 TO 3/31/2024—Continued

Case No.	Received date	Commencement date	If amendment, type of amendment	Chemical substance
J–24–0002 ..	03/20/2024	03/08/2024	N	(G) Chromosomally modified saccharomyces cerevisiae.
P–21–0115	03/26/2024	03/25/2024	N	(G) Heteromonocycle, polymer, substituted aliphatic carbamate, [2-[(1-oxo-2-propen-1-yl)oxy]alkyl]ester.
P–21–0198	03/01/2024	03/01/2024	N	(G) Reaction product of polyester with alpha-hydro-omega-hydroxypoly(oxy-1,4-butanediyl) and 1,1′-methylenebis[isocyanatobenzene],
P–21–0205	03/25/2024	03/15/2024	N	(S) Benzene, [2-[(2-methyl-1-undecen-1-yl)oxy]ethyl]-.
P–22–0019	03/01/2024	02/03/2024	N	(G) Protein sodium complexes, polymers with aromatic acid chloride, ethylene diamine and amino acid.
P–22–0058	03/14/2024	03/04/2024	N	(S) Methanesulfonamide,1,1,1-trifluoro-n-[(trifluoromethyl)sulfonyl]-, sodium salt (1:1).
P–22–0082	03/18/2024	02/24/2024	N	(G) Alkenoic acid, alkyl, carbopolycyclic alkyl ester, polymer with trihalo (trihaloalkyl) alkyl alkyl alkenoate.

In Table III of this unit, EPA provides the following information (to the extent such information is not subject to a CBI claim) on the test information that has been received during this time period: The EPA case number assigned to the test information; the date the test information was received by EPA, the type of t est information submitted, and chemical substance identity.

TABLE III—TEST INFORMATION RECEIVED FROM 3/01/2024 TO 3/31/2024

Case No.	Received date	Type of test information	Chemical Substance
P–14–0712	03/25/2024	Polychlorinated Dibenzodioxins and Polychlorinated dibenzofurans Testing.	(S) Waste plastics, pyrolyzed, C5–55 fraction.
P–14–0712	03/29/2024	Polychlorinated Dibenzodioxins and Polychlorinated dibenzofurans Testing.	(S) Waste plastics, pyrolyzed, C5–55 fraction.
P–24–0097, ... P–24–0098	03/12/2024	Water Solubility: Column Elution Method; Shake Flask Method (OECD Test Guideline 105); Modified OECD 316/OPPTS Test Guideline 835.2210: Direct Photolysis Rate in Water by Sunlight; Direct Aqueous Photodegradation in Buffer Solutions; Estimation of n-Octanol/Water Partition Coefficient Using High Performance Liquid Chromotography (HPLC); Determination of the Dissociation Constants for Five Photoacid Generators (PAGs) in Water and the Degree of Dissociation of their Ion Pairs.	(G) Sulfonium, tris(4-fluorophenyl)-, (substituted phenoxy)alkyl substituted benzoate (1:1).

If you are interested in information that is not included in these tables, you may contact EPA's technical information contact or general information contact as described under **FOR FURTHER INFORMATION CONTACT** to access additional non-CBI information that may be available.

Authority: 15 U.S.C. 2601 *et seq.*

Dated: April 10, 2024.

Pamela Myrick,

Director, Project Management and Operations Division, Office of Pollution Prevention and Toxics.

[FR Doc. 2024–07895 Filed 4–12–24; 8:45 am]

BILLING CODE 6560–50–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0286; FR ID 213610]

Information Collection Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act of 1995 (PRA), the Federal Communications Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s). Comments are requested concerning: whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control

number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written comments should be submitted on or before June 14, 2024. If you anticipate that you will be submitting comments but find it difficult to do so within the period of time allowed by this notice, you should advise the contacts below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email to *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION:

OMB Control No.: 3060–0286.

Title: Section 80.302, Notice of Discontinuance, Reduction, or Impairment of Service Involving a Distress Watch.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for profit, not-for-profit institutions, and State, local, or Tribal government.

Number of Respondents and Responses: 49 respondents and 49 responses.

Estimated Time per Response: 1 hour.

Frequency of Response: Third party disclosure requirement.

Obligation to Respond: Required to retain or obtain benefits. The statutory authority for this collection 47 U.S.C. 154, 303, 307(e), 309 and 332, unless noted.

Total Annual Burden: 49 hours.

Annual Cost Burden: No cost.

Needs and Uses: The reporting requirement contained in section 80.302 is necessary to ensure that the U.S. Coast Guard is timely notified when a coast station, which is responsible for maintaining a listening watch on a designated marine distress and safety frequency discontinues, reduces, or impairs its communications services. This notification allows the Coast Guard to seek an alternate means of providing radio coverage to protect the safety of life and property at sea or object to the planned diminution of service. The information is used by the U.S. Coast Guard district office nearest to the coast station. Once the Coast Guard is aware that such a situation exists, it is able to inform the maritime community that radio coverage has or will be affected and/or seek to provide coverage of the safety watch via alternate means.

Federal Communications Commission.

Marlene Dortch,

Secretary, Office of the Secretary.

[FR Doc. 2024–07919 Filed 4–12–24; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–1158; FR ID 213645]

Information Collection Being Submitted for Review and Approval to Office of Management and Budget

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, as required by the Paperwork Reduction Act (PRA) of 1995, the Federal Communications Commission (FCC or the Commission) invites the general public and other Federal Agencies to take this opportunity to comment on the following information collection. Pursuant to the Small Business Paperwork Relief Act of 2002, the FCC seeks specific comment on how it might ''further reduce the information collection burden for small business concerns with fewer than 25 employees.'' The Commission may not conduct or sponsor a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written comments and recommendations for the proposed information collection should be submitted on or before May 15, 2024.

ADDRESSES: Comments should be sent to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Your comment must be submitted into *www.reginfo.gov* per the above instructions for it to be considered. In addition to submitting in *www.reginfo.gov* also send a copy of your comment on the proposed information collection to Nicole Ongele, FCC, via email to *PRA@fcc.gov* and to *Nicole.Ongele@fcc.gov.* Include in the comments the OMB control number as shown in the **SUPPLEMENTARY INFORMATION** below.

FOR FURTHER INFORMATION CONTACT: For additional information or copies of the information collection, contact Nicole Ongele at (202) 418–2991. To view a copy of this information collection request (ICR) submitted to OMB: (1) go to the web page *http://www.reginfo.gov/public/do/PRAMain,* (2) look for the section of the web page called ''Currently Under Review,'' (3) click on the downward-pointing arrow in the ''Select Agency'' box below the ''Currently Under Review'' heading, (4) select ''Federal Communications Commission'' from the list of agencies presented in the ''Select Agency'' box, (5) click the ''Submit'' button to the right of the ''Select Agency'' box, (6) when the list of FCC ICRs currently under review appears, look for the Title of this ICR and then click on the ICR Reference Number. A copy of the FCC submission to OMB will be displayed.

SUPPLEMENTARY INFORMATION: As part of its continuing effort to reduce paperwork burdens, as required by the Paperwork Reduction Act (PRA) of 1995 (44 U.S.C. 3501–3520), the FCC invited the general public and other Federal Agencies to take this opportunity to comment on the following information collection. Comments are requested concerning: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. Pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107–198, see 44 U.S.C. 3506(c)(4), the FCC seeks specific comment on how it might ''further reduce the information collection burden for small business concerns with fewer than 25 employees.''

OMB Control Number: 3060–1158.

Title: Transparency Rule Disclosures, Restoring Internet Freedom, Report and Order, WC Docket No. 17–108.

Form Number: N/A.

Type of Review: Extension of a currently-approved collection.

Respondents: Business or other for-profit entities, not-for-profit entities; State, local, or Tribal governments.

Number of Respondents and Responses: 2,384 respondents; 2,384 responses.

Estimated Time per Response: 26 hours.

Frequency of Response: On occasion reporting requirement; third party disclosure requirement.

Obligation to Respond: Mandatory. Statutory authority for these collections is contained in section 257 of the Communications Act of 1934, as amended, 47 U.S.C. 257.

Total Annual Burden: 61,984 hours.

Total Annual Cost: $510,000.

Needs and Uses: The Restoring Internet Freedom Report and Order (*Restoring Internet Freedom Order*) revised the information collection requirements applicable to internet service providers (ISPs). The *Open Internet Order,* adopted in 2010, required ISPs to disclose certain network management processes, performance characteristics, and other attributes of broadband internet access service. These disclosure requirements were significantly increased by the *Title II Order,* adopted in 2015. The *Restoring Internet Freedom Order* eliminated the additional collection imposed by the *Title II Order,* and added a few discrete elements to the *Open Internet Order*'s information collection requirements. The *Restoring Internet Freedom Order* requires an ISP to publicly disclose network management practices, performance, and commercial terms of its broadband internet access service sufficient to enable consumers to make informed choices regarding the purchase and use of such services, and entrepreneurs and other small businesses to develop, market, and maintain internet offerings. As part of these disclosures, the rule requires ISPs to disclose their congestion management, application-specific behavior, device attachment rules, and security practices, as well as any blocking, throttling, affiliated prioritization, or paid prioritization in which they engage. The rule also requires ISPs to disclose performance characteristics, including a service description and the impact of nonbroadband internet access services data services. Finally, the rule requires ISPs to disclose the price of the service, privacy policies, and redress options. The rule requires ISPs to make such disclosures available either via a publicly-available, easily accessible website or through transmittal to the Commission, which will make such disclosures available via a publicly-available, easily accessible website. The information collection will assist the Commission in its statutory obligation to report to Congress on market entry barriers in the telecommunications market. The Commission anticipates that the revised disclosures would empower consumers and businesses with information about their broadband internet access service, protecting the openness of the internet. Although this collection was bifurcated in 2016 with respect to fixed and mobile ISPs, the Commission seeks to have this collection encompass both fixed and mobile ISPs.

Federal Communications Commission.

Marlene Dortch,

Secretary, Office of the Secretary.

[FR Doc. 2024–07920 Filed 4–12–24; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL COMMUNICATIONS COMMISSION

[OMB 3060–0216; 3060–0788; 3060–1218; FR ID 213636]

Information Collections Being Reviewed by the Federal Communications Commission Under Delegated Authority

AGENCY: Federal Communications Commission.

ACTION: Notice and request for comments.

SUMMARY: As part of its continuing effort to reduce paperwork burdens, and as required by the Paperwork Reduction Act of 1995 (PRA), the Federal Communications Commission (FCC or Commission) invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s). Comments are requested concerning: whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; the accuracy of the Commission's burden estimate; ways to enhance the quality, utility, and clarity of the information collected; ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology; and ways to further reduce the information collection burden on small business concerns with fewer than 25 employees. The FCC may not conduct or sponsor a collection of information unless it displays a currently valid Office of Management and Budget (OMB) control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the PRA that does not display a valid OMB control number.

DATES: Written comments should be submitted on or before June 14, 2024. If you anticipate that you will be submitting comments but find it difficult to do so within the period of time allowed by this notice, you should advise the contacts below as soon as possible.

ADDRESSES: Direct all PRA comments to Cathy Williams, FCC, via email to *PRA@fcc.gov* and to *Cathy.Williams@fcc.gov.*

FOR FURTHER INFORMATION CONTACT: For additional information about the information collection, contact Cathy Williams at (202) 418–2918.

SUPPLEMENTARY INFORMATION: *OMB Control Number:* 3060–0216.

Title: Section 73.3538, Application to Make Changes in an Existing Station; section 73.1690(e), Modification of Transmission Systems.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities, Not-for-profit institutions.

Number of Respondents and Responses: 650 respondents; 650 responses.

Estimated Hours per Response: 0.50–3 hours.

Frequency of Response: On occasion reporting requirement; Recordkeeping requirement.

Total Annual Burden: 1,100 hours.

Annual Burden Cost: No cost.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection is contained in Sections 154(i), 303 and 308 of the Communications Act of 1934, as amended.

Needs and Uses: The information collection requirements contained in section 73.3538(b)(1) of the Commission's rules requires a broadcast station to file an informal application to modify or discontinue the obstruction marking or lighting of an antenna supporting structure.

The information collection requirements contained in section 73.1690(e) of the Commission's rules requires AM, FM and TV station licensees to prepare an informal statement or diagram describing any electrical and mechanical modification to authorized transmitting equipment that can be made without prior Commission approval provided that equipment performance measurements are made to ensure compliance with FCC rules. This informal statement or diagram must be retained at the transmitter site as long as the equipment is in use.

OMB Control Number: 3060–0788.

Title: DTV Showings/Interference Agreements.

Form Number: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities, Not-for-profit institutions.

Number of Respondents and Responses: 300 respondents; 300 responses.

Estimated Hours per Response: 5 hours.

Frequency of Response: On occasion reporting requirement, Third Party Disclosure requirement.

Total Annual Burden: 1,500 hours.

Total Annual Cost: $3,900,000.

Obligation to Respond: Required to obtain or retain benefits. The statutory authority for this collection is contained in sections 154(i), 303 and 308 of the Communications Act of 1934, as amended.

Needs and Uses: The information collection requirements contained in 47 CFR 73.623 requires applicants to submit a technical showing to establish that their proposed facilities will not result in additional interference to TV broadcast operations. The Commission permits broadcasters to agree to proposed TV facilities that do not conform to the allotted parameters, even though they might be affected by potential new interference. The Commission will consider granting applications on the basis of interference agreements if it finds that such grants will serve the public interest. These agreements must be signed by all parties to the agreement. In addition, the Commission needs the following information to enable such public interest determinations: A list of parties predicted to receive additional interference from the proposed facility; a showing as to why a grant based on the agreements would serve the public interest; and technical studies depicting the additional interference. The technical showings and interference agreements will be used by FCC staff to determine if the public interest would be served by the grant of the application and to ensure that the proposed facilities will not result in additional interference.

OMB Control No.: 3060–1218.

Title: Carriage of Digital Television Broadcast Signals: Amendment to Part 76 of the Commission's Rules.

Form No.: N/A.

Type of Review: Extension of a currently approved collection.

Respondents: Business or other for-profit entities.

Number of Respondents and Responses: 11 respondents and 11 responses.

Estimated Time per Response: 0.25 hours (15 minutes).

Frequency of Response: Third party disclosure requirement and recordkeeping requirement.

Total Annual Burden: 3 hours.

Total Annual Cost Burden: No cost.

Obligation to Respond: Required in order to monitor regulatory compliance. The statutory authority for this information collection is contained in sections 4, 303, 614, and 615 of the Communications Act of 1934, as amended.

Needs and Uses: The information collection imposes a notification requirement on certain small cable systems that become ineligible for exemption from the requirement to carry high definition broadcast signals in HD (adopted in FCC 15–65). In particular, the information collection requires that, beginning December 12, 2016, at the time a small cable system utilizing the HD carriage exemption offers any programming in HD, the system must give notice that it is offering HD programming to all broadcast stations in its market that are carried on its system. Cable operators also must keep records of such notification. This information collection requirement allows affected broadcast stations to monitor compliance with the requirement that cable operators transmit high definition broadcast signals in HD.

Federal Communications Commission.

Marlene Dortch,

Secretary, Office of the Secretary.

[FR Doc. 2024–07921 Filed 4–12–24; 8:45 am]

BILLING CODE 6712–01–P

FEDERAL ELECTION COMMISSION

Sunshine Act Meetings

TIME AND DATE: Thursday, April 18, 2024, at 10 a.m.

PLACE: Hybrid meeting: 1050 First Street, NE Washington, DC (12th floor) and virtual.

Note: For those attending the meeting in person, current COVID–19 safety protocols for visitors, which are based on the CDC COVID–19 hospital admission level in Washington, DC, will be updated on the Commission's contact page by the Monday before the meeting. See the contact page at *https://www.fec.gov/contact/.* If you would like to virtually access the meeting, see the instructions below.

STATUS: This meeting will be open to the public, subject to the above-referenced guidance regarding the COVID–19 hospital admission level and corresponding health and safety procedures. To access the meeting virtually, go to the commission's website *www.fec.gov* and click on the banner to be taken to the meeting page.

MATTERS TO BE CONSIDERED:

Draft Advisory Opinion 2024–03: *PoliticalMeetings.com* LLC.

REG 2019–01 (Valuable Information)—Draft Notice of Disposition.

REG 2015–03 (Contributions from Corporations and Other Organizations)—Draft Notice of Disposition.

REG 2024–02 (Implementation of FOIA Improvement Act)—Draft Interim Final Rule.

Management and Administrative Matters.

CONTACT PERSON FOR MORE INFORMATION: Judith Ingram, Press Officer, Telephone: (202) 694–1220.

Individuals who plan to attend in person and who require special assistance, such as sign language interpretation or other reasonable accommodations, should contact Laura E. Sinram, Secretary and Clerk, at (202) 694–1040 or *secretary@fec.gov,* at least 72 hours prior to the meeting date.

(Authority: Government in the Sunshine Act, 5 U.S.C. 552b)

Laura E. Sinram,

Secretary and Clerk of the Commission.

[FR Doc. 2024–08033 Filed 4–11–24; 4:15 pm]

BILLING CODE 6715–01–P

DEPARTMENT OF DEFENSE

GENERAL SERVICES ADMINISTRATION

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[OMB Control No. 9000–0154; Docket No. 2024–0053; Sequence No. 10]

Information Collection; Construction Wage Rate Requirements—Price Adjustment (Actual Method)

AGENCY: Department of Defense (DOD), General Services Administration (GSA), and National Aeronautics and Space Administration (NASA).

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, and the Office of Management and Budget (OMB) regulations, DoD, GSA, and NASA invite the public to comment on an extension concerning construction wage rate requirements—price

adjustment (Actual Method). DoD, GSA, and NASA invite comments on: whether the proposed collection of information is necessary for the proper performance of the functions of Federal Government acquisitions, including whether the information will have practical utility; the accuracy of the estimate of the burden of the proposed information collection; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the information collection on respondents, including the use of automated collection techniques or other forms of information technology. OMB has approved this information collection for use through August 31, 2024. DoD, GSA, and NASA propose that OMB extend its approval for use for three additional years beyond the current expiration date.

DATES: DoD, GSA, and NASA will consider all comments received by June 14, 2024.

ADDRESSES: DoD, GSA, and NASA invite interested persons to submit comments on this collection through *https://www.regulations.gov* and follow the instructions on the site. This website provides the ability to type short comments directly into the comment field or attach a file for lengthier comments. If there are difficulties submitting comments, contact the GSA Regulatory Secretariat Division at 202–501–4755 or *GSARegSec@gsa.gov.*

Instructions: All items submitted must cite OMB Control No. 9000–0154, Construction Wage Rate Requirements—Price Adjustment (Actual Method). Comments received generally will be posted without change to *https://www.regulations.gov,* including any personal and/or business confidential information provided. To confirm receipt of your comment(s), please check *www.regulations.gov,* approximately two-to-three days after submission to verify posting.

FOR FURTHER INFORMATION CONTACT: Zenaida Delgado, Procurement Analyst, at telephone 202–969–7207, or *zenaida.delgado@gsa.gov*.

SUPPLEMENTARY INFORMATION:

A. OMB Control Number, Title, and Any Associated Form(s)

9000–0154, Construction Wage Rate Requirements—Price Adjustment (Actual Method).

B. Need and Uses

This clearance covers the information that contractors must submit to comply with the following Federal Acquisition Regulation (FAR) requirement:

FAR 52.222–32, Construction Wage Rate Requirements-Price Adjustment (Actual Method). This clause requires contractors to submit at the exercise of each option to extend the term of the contract, a statement of the amount claimed for incorporation of the most current Department of Labor wage determination, and any relevant supporting data, including payroll records, that the contracting officer may reasonably require.

Contracting officers use the information to establish the contract's construction requirements price adjustment to reflect the contractor's actual increase or decrease in wages and fringe benefits.

C. Annual Burden

Respondents: 405.
Total Annual Responses: 405.
Total Burden Hours: 16,200.
Obtaining Copies: Requesters may obtain a copy of the information collection documents from the GSA Regulatory Secretariat Division by calling 202–501–4755 or emailing *GSARegSec@gsa.gov.* Please cite OMB Control No. 9000–0154, Construction Wage Rate Requirements—Price Adjustment (Actual Method).

Janet Fry,

Director, Federal Acquisition Policy Division, Office of Governmentwide Acquisition Policy, Office of Acquisition Policy, Office of Governmentwide Policy.

[FR Doc. 2024–07875 Filed 4–12–24; 8:45 am]

BILLING CODE 6820–EP–P

GENERAL SERVICES ADMINISTRATION

[Notice–ME–2024–01; Docket No. 2024–0002; Sequence No. 16]

Public Review and Comment of the Mid-Term Self-Assessment Report of the United States' 5th Open Government National Action Plan; Request for Public Comment

AGENCY: Office of Government-wide Policy; General Services Administration, (GSA).

ACTION: Notice; request for public comment.

SUMMARY: This notice informs the public of the opportunity to provide input on the self-assessment report created in support of the United States' participation in the Open Government Partnership (OGP). This input will be considered as GSA Office of Government-wide Policy finalizes the self-assessment prior to submission to the OGP. The United States has been a committed member of the Open Government Partnership since its inception, actively participating in the global effort to promote transparent, participative, and accountable governance. As part of this ongoing commitment, the United States is in the process of implementing its 5th Open Government National Action Plan (NAP 5), which outlines 36 commitments to further advance open government principles domestically and internationally. In accordance with OGP recommendations, the U.S. is conducting a mid-term self-assessment of the current NAP 5. This assessment serves as an essential tool for both self-reflection and planning, enabling the identification of achievements, challenges, and areas for improvement.

DATES: Responses to this request for comment should be received by Monday, June 10, 2024.

ADDRESSES: Submit comments in response to Notice ''Docket 2024–0002'' by *http://www.regulations.gov.* Submit comments via the Federal eRulemaking portal by searching for ''Docket 2024–0002.'' Select the link ''Comment Now'' that corresponds with ''Docket 2024–0002.'' Follow the instructions provided at the screen. Please include your name, organization name (if any), and ''Docket 2024–0002'' on your attached document. All received public comments are subject to the Freedom of Information Act and will be posted in their entirety at regulations.gov, including any personal and business confidential information provided. Do not include any information you would not like to be made publicly available.

Instructions for Submission: Please follow the guidelines in the attached public commenting policy. GSA has provided some key topics on which public insights would be most valuable (see **SUPPLEMENTARY INFORMATION**). You may respond to some or all of these topics, and additional feedback beyond these topics is also welcome.

FOR FURTHER INFORMATION CONTACT: Daniel York, GSA Open Government Secretariat, Office of Government-wide Policy, by email at *opengovernmentsecretariat@gsa.gov* or by phone at 202–357–9624.

SUPPLEMENTARY INFORMATION: The mid-term self-assessment report is a critical component of the OGP's iterative process, designed to foster continuous learning and development within member countries. To ensure a comprehensive and inclusive review of the work done on NAP 5 to date, GSA invites public feedback on the mid-term self-assessment.

GSA seeks to collect feedback from the public on the following aspects of

the 5th Open Government NAP mid-term self-assessment report:

- *Assessment Clarity and Comprehensiveness:* Feedback on the clarity and thoroughness of the report itself in presenting the progress and challenges encountered during both the co-creation process and the implementation process.
- *Insights and Learning:* Observations on the lessons and insights derived from the self-assessment process, including any areas that may benefit from deeper analysis.
- *Engagement and Inclusivity:* Views of the effectiveness of stakeholder engagement efforts (including suggestions for enhancing inclusivity) during the initial co-creation and the implementation processes since the GSA Open Government Secretariat was stood up in the summer of 2023.
- *Utility and Application:* Recommendations on how the Lessons and Insights of the report can be better used to inform the remaining implementation phase and future Open Government Action Plans.

Resources

Open Government Partnership (OGP) Independent Review Mechanism (IRM) Self-Assessment Guidance at *https://www.opengovpartnership.org/wp-content/uploads/2001/01/OGP_self_assessment_cal%20FINAL.pdf.*

Krystal J. Brumfield,

Associate Administrator, Office of Government-wide Policy, General Services Administration.

[FR Doc. 2024–07900 Filed 4–11–24; 4:15 pm]

BILLING CODE 6820–UA–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Notice of Closed Meeting

Pursuant to 5 U.S.C. 1009(d), notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended, and the Determination of the Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, CDC, pursuant to Public Law 92–463. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: Disease, Disability, and Injury Prevention and Control Special Emphasis Panel (SEP)—RFA–OH–22–002, NIOSH Centers for Agricultural Safety and Health.

Date: May 23, 2024.

Time: 1 p.m.–5 p.m., EDT.

Place: Video-Assisted Meeting.

Agenda: To review and evaluate grant applications.

For Further Information Contact: Marilyn Ridenour, B.S.N., M.P.H., Scientific Review Officer, Office of Extramural Programs, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, 1095 Willowdale Road, Morgantown, West Virginia 26505. Telephone: (304) 285–5879; Email: *MRidenour@cdc.gov.*

The Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Kalwant Smagh,

Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–07850 Filed 4–12–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Solicitation of Nominations for Appointment to the Healthcare Infection Control Practices Advisory Committee

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: In accordance with the Federal Advisory Committee Act, the Centers for Disease Control and Prevention (CDC), within the Department of Health and Human Services (HHS), is seeking nominations for membership on the Healthcare Infection Control Practices Advisory Committee (HICPAC). HICPAC consists of 14 experts in fields including, but not limited to, infectious diseases, infection prevention, healthcare epidemiology, nursing, clinical and environmental microbiology, surgery, hospitalist medicine, internal medicine, epidemiology, health policy, health services research, public health, and related fields.

DATES: Nominations for membership on HICPAC must be received no later than September 30, 2024. Packages received after this time will not be considered for the current membership cycle.

ADDRESSES: All nominations should be emailed to *hicpac@cdc.gov;* mailed to HICPAC, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, l600 Clifton Road NE, Mailstop H16–3, Atlanta, Georgia 30329–4027; or faxed to (404) 639–4043.

FOR FURTHER INFORMATION CONTACT: Sydnee Byrd, M.P.A., Healthcare Infection Control Practices Advisory Committee, Division of Healthcare Quality Promotion, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, l600 Clifton Road NE, Mailstop H16–3, Atlanta, Georgia 30329–4027. Telephone: (404) 718–8039; email: *hicpac@cdc.gov.*

SUPPLEMENTARY INFORMATION: Nominations are sought for individuals who have the expertise and qualifications necessary to contribute to the accomplishment of the objectives of the Healthcare Infection Control Practices Advisory Committee (HICPAC). Nominees will be selected based on expertise in the fields of infectious diseases, infection prevention, healthcare epidemiology, nursing, clinical and environmental microbiology, surgery, internal medicine, occupational health, and public health. Federal employees will not be considered for membership. Members may be invited to serve for up to four-year terms. Selection of members is based on candidates' qualifications to contribute to the accomplishment of HICPAC objectives (*https://www.cdc.gov/hicpac/*).

Department of Health and Human Services (HHS) policy stipulates that committee membership be balanced in terms of points of view represented, and the committee's function. Appointments shall be made without discrimination on the basis of age, race, ethnicity, gender, sexual orientation, gender identity, HIV status, disability, and cultural, religious, or socioeconomic status. Nominees must be U.S. citizens and cannot be full-time employees of the U.S. Government. Current participation on Federal workgroups or prior experience serving on a Federal advisory committee does not disqualify a candidate; however, HHS policy is to avoid excessive individual service on advisory committees and multiple

committee memberships. Committee members are Special Government Employees, requiring the filing of financial disclosure reports at the beginning of and annually during their terms. The Centers for Disease Control and Prevention (CDC) reviews potential candidates for HICPAC membership each year and provides a slate of nominees for consideration to the Secretary of HHS for final selection. HHS notifies selected candidates of their appointment near the start of the term in July 2025, or as soon as the HHS selection process is completed. Note that the need for different expertise varies from year to year and a candidate who is not selected in one year may be reconsidered in a subsequent year.

Candidates should submit the following items:

- Current curriculum vitae, including complete contact information (telephone numbers, mailing address, email address)

- At least one letter of recommendation from person(s) not employed by HHS. Candidates may submit letter(s) from current HHS employees if they wish, but at least one letter must be submitted by a person not employed by an HHS agency (*e.g.,* CDC, National Institutes of Health, Food and Drug Administration).

Nominations may be submitted by the candidate or by the person/organization recommending the candidate.

The Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Kalwant Smagh

Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–07851 Filed 4–12–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Meeting of the Advisory Board on Radiation and Worker Health, National Institute for Occupational Safety and Health

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, the Centers for Disease Control and Prevention (CDC) announces the following meeting of the Advisory Board on Radiation and Worker Health (ABRWH or the Advisory Board). This meeting is open to the public, but without a public comment period. The public is welcome to submit written comments in advance of the meeting, to the contact person below. Written comments received in advance of the meeting will be included in the official record of the meeting. The public is also welcomed to listen to the meeting by joining the teleconference (information below). The audio conference line has 150 ports for callers.

DATES: The meeting will be held on June 26, 2024, from 11 a.m. to 1 p.m., EDT. Written comments must be received on or before June 19, 2024.

ADDRESSES: You may submit comments by mail to: Rashaun Roberts, National Institute for Occupational Safety and Health, 1090 Tusculum Avenue, MS C–24, Cincinnati, Ohio 45226.

Meeting Information: Audio Conference Call via FTS Conferencing. The USA toll-free dial-in number is 1–866–659–0537; the pass code is 9933701.

FOR FURTHER INFORMATION CONTACT: Rashaun Roberts, Ph.D., Designated Federal Officer, National Institute for Occupational Safety & Health, Centers for Disease Control and Prevention, 1090 Tusculum Avenue, Mailstop C–24, Cincinnati, Ohio 45226, telephone (513) 533–6800, toll free 1(800) 232–4636, email *ocas@cdc.gov.*

SUPPLEMENTARY INFORMATION:

Background: The Advisory Board was established under the Energy Employees Occupational Illness Compensation Program Act of 2000 to advise the President on a variety of policy and technical functions required to implement and effectively manage the new compensation program. Key functions of the Advisory Board include providing advice on the development of probability of causation guidelines that have been promulgated by the Department of Health and Human Services (HHS) as a final rule, advice on methods of dose reconstruction which have also been promulgated by HHS as a final rule, advice on the scientific validity and quality of dose estimation and reconstruction efforts being performed for purposes of the compensation program, and advice on petitions to add classes of workers to the Special Exposure Cohort (SEC). In December 2000, the President delegated responsibility for funding, staffing, and operating the Advisory Board to HHS, which subsequently delegated this authority to the CDC. NIOSH implements this responsibility for CDC.

The charter was issued on August 3, 2001, renewed at appropriate intervals, and rechartered under Executive Order 14109 on March 22, 2024. Unless continued by the President the Board will terminate on September 30, 2025, consistent with E.O. 14109 of September 29, 2023.

Purpose: The Advisory Board is charged with (a) providing advice to the Secretary, HHS, on the development of guidelines under Executive Order 13179; (b) providing advice to the Secretary, HHS, on the scientific validity and quality of dose reconstruction efforts performed for this program; and (c) upon request by the Secretary, HHS, advise the Secretary on whether there is a class of employees at any Department of Energy (DOE) facility who were exposed to radiation but for whom it is not feasible to estimate their radiation dose, and on whether there is reasonable likelihood that such radiation doses may have endangered the health of members of this class.

Matters to be Considered: The agenda will include discussions on the following: 1. Update on Cybersecurity Modernization Initiative; 2. Special Exposure Cohort (SEC) Status Update; 3. Updates from Workgroups and Subcommittees 4. Plans for the August 2024 Board Meeting. Agenda items are subject to change as priorities dictate.

The Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and

Prevention and the Agency for Toxic Substances and Disease Registry.

Kalwant Smagh,

Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–07847 Filed 4–12–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Meeting of the Advisory Board on Radiation and Worker Health, Subcommittee for Dose Reconstruction Review, National Institute for Occupational Safety and Health

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, the Centers for Disease Control and Prevention (CDC) announces the following meeting for the Subcommittee for Dose Reconstruction Review of the Advisory Board on Radiation and Worker Health (ABRWH or the Advisory Board). This meeting is open to the public, but without a public comment period. The public is welcome to submit written comments in advance of the meeting, to the contact person below.

DATES: The meeting will be held on June 4, 2024, from 11 a.m. to 4 p.m., EDT.

Written comments must be received on or before May 27, 2024.

ADDRESSES: You may submit comments by mail to: Rashaun Roberts, National Institute for Occupational Safety and Health, 1090 Tusculum Avenue, MS C–24, Cincinnati, Ohio 45226.

Meeting Information: Audio Conference Call via FTS Conferencing. The USA toll-free dial-in number is 1–866–659–0537; the pass code is 9933701.

Written comments received in advance of the meeting will be included in the official record of the meeting. The public is also welcomed to listen to the meeting by joining the audio conference (information below). The audio conference line has 150 ports for callers.

FOR FURTHER INFORMATION CONTACT: Rashaun Roberts, Ph.D., Designated Federal Officer, National Institute for Occupational Safety & Health, Centers for Disease Control and Prevention, 1090 Tusculum Avenue, Mailstop C–24, Cincinnati, Ohio 45226, telephone: (513) 533–6800, toll free 1(800) 232–4636, email: *ocas@cdc.gov.*

SUPPLEMENTARY INFORMATION:

Background: The Advisory Board was established under the Energy Employees Occupational Illness Compensation Program Act of 2000 to advise the President on a variety of policy and technical functions required to implement and effectively manage the new compensation program. Key functions of the Advisory Board include providing advice on the development of probability of causation guidelines that have been promulgated by the Department of Health and Human Services (HHS) as a final rule; advice on methods of dose reconstruction, which have also been promulgated by HHS as a final rule; advice on the scientific validity and quality of dose estimation and reconstruction efforts being performed for purposes of the compensation program; and advice on petitions to add classes of workers to the Special Exposure Cohort (SEC). In December 2000, the President delegated responsibility for funding, staffing, and operating the Advisory Board to HHS, which subsequently delegated this authority to CDC. NIOSH implements this responsibility for CDC.

The charter was issued on August 3, 2001, renewed at appropriate intervals, and rechartered under Executive Order 14109 on March 22, 2024. Unless continued by the President the Board will terminate on September 30, 2025, consistent with E.O. 14109 of September 29, 2023.

Purpose: The Advisory Board is charged with (a) providing advice to the Secretary, HHS, on the development of guidelines under Executive Order 13179; (b) providing advice to the Secretary, HHS, on the scientific validity and quality of dose reconstruction efforts performed for this program; and (c) upon request by the (DOE) facility who were exposed to radiation but for whom it is not feasible to estimate their radiation dose, and on whether there is reasonable likelihood that such radiation doses may have endangered the health of members of this class. SDRR is responsible for overseeing, tracking, and participating in the reviews of all procedures used in the dose reconstruction process by the NIOSH Division of Compensation Analysis and Support (DCAS) and its dose reconstruction contractor (Oak Ridge Associated Universities—ORAU).

Matters to be Considered: The agenda will include discussions on the following: 1. Issues Resolution from Set 31. Facilities that may be covered include: Feed Materials Production Center (FMPC), General Atomics, General Electric Vallecitos, General Steel Industries (South Plant), Hanford, Idaho National Laboratory, Kansas City Plant, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, Metals and Controls Corp., Oak Ridge Gaseous Diffusion Plant (K–25), Oak Ridge National Laboratory (X–10), Pacific Northwest National Laboratory, Paducah Gaseous Diffusion Plant, Pantex Plant, Portsmouth Gaseous Diffusion Plant, Rocky Flats Plant, Sandia National Laboratories, Savannah River Site, and Y–12 Plant; 2. Issues resolution: Tab 585 from Set 29 (Pantex); 3. Report and further discussion on changes to selection criteria. Agenda items are subject to change as priorities dictate.

The Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Kalwant Smagh,

Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–07848 Filed 4–12–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention

Solicitation of Nominations for Appointment to the Advisory Council for the Elimination of Tuberculosis

AGENCY: Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS).

ACTION: Notice.

SUMMARY: In accordance with the Federal Advisory Committee Act, the Centers for Disease Control and Prevention (CDC), within the Department of Health and Human Services (HHS), is seeking nominations for membership on the Advisory Council for the Elimination of Tuberculosis (ACET). ACET consists of 10 experts including the Chair in fields associated with public health, epidemiology, immunology, infectious diseases, pulmonary disease, pediatrics,

tuberculosis, microbiology, and preventive health care delivery.

DATES: Nominations for membership on ACET must be received no later than September 30, 2024. Packages received after this time will not be considered for the current membership cycle.

ADDRESSES: All nominations should be emailed to *nchhstppolicy@cdc.gov* with the subject line ''ACET 2025 Nomination.''

FOR FURTHER INFORMATION CONTACT: Marah Condit, M.S., Committee Management Lead, Office of Policy, Planning, and Partnerships, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road NE, Mailstop US8–6, Atlanta, Georgia 30329–4027. Telephone: (404) 639–3423; email: *nchhstppolicy@cdc.gov.*

SUPPLEMENTARY INFORMATION: The Advisory Council for the Elimination of Tuberculosis (ACET) provides advice and recommendations regarding the elimination of tuberculosis (TB) to the Secretary, Department of Health and Human Services (HHS); the Assistant Secretary for Health, HHS; and the Director, Centers for Disease Control and Prevention (CDC). ACET (a) makes recommendations on policies, strategies, objectives, and priorities; (b) addresses development and application of new technologies; (c) provides guidance and review of CDC's TB prevention research portfolio and program priorities; and (d) reviews the extent to which progress has been made toward eliminating TB.

Nominations are sought for persons who have expertise and qualifications necessary to contribute to the accomplishment of the objectives of ACET. Nominees will be selected on the basis of their expertise in public health, epidemiology, immunology, infectious diseases, pulmonary disease, pediatrics, tuberculosis, microbiology, or preventive health care delivery. Federal employees will not be considered for membership. Members may be invited to serve for up to four-year terms. Selection of members is based on candidates' qualifications to contribute to the accomplishment of ACET objectives.

HHS policy stipulates that committee membership be balanced in terms of points of view represented and the committee's function. Appointments shall be made without discrimination on the basis of age, race, ethnicity, gender, sexual orientation, gender identity, HIV status, disability, and cultural, religious, or socioeconomic status. Nominees must be U.S. citizens and cannot be full-time employees of the U.S. Government. Current participation on Federal workgroups or prior experience serving on a Federal advisory committee does not disqualify a candidate; however, HHS policy is to avoid excessive individual service on advisory committees and multiple committee memberships. Committee members are Special Government Employees, requiring the filing of financial disclosure reports at the beginning of and annually during their terms. CDC reviews potential candidates for ACET membership each year and provides a slate of nominees for consideration to the Secretary of HHS for final selection. HHS notifies selected candidates of their appointment near the start of the term in July 2025, or as soon as the HHS selection process is completed. Note that the need for different expertise varies from year to year and a candidate who is not selected in one year may be reconsidered in a subsequent year.

Candidates should submit the following items:

- Current curriculum vitae, including complete contact information (telephone numbers, mailing address, and email address)
- At least one letter of recommendation from person(s) not employed by HHS. Candidates may submit letter(s) from current HHS employees if they wish, but at least one letter must be submitted by a person not employed by an HHS agency (*e.g.,* CDC, National Institutes of Health, Food and Drug Administration).

Nominations may be submitted by the candidate or by the person/organization recommending the candidate. CDC will collect and retain nominations received for up to two years to create a pool of potential ACET nominees. When a vacancy occurs, CDC will review nominations and may contact nominees at that time.

The Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention, has been delegated the authority to sign **Federal Register** notices pertaining to announcements of meetings and other committee management activities, for both the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry.

Kalwant Smagh,

Director, Office of Strategic Business Initiatives, Office of the Chief Operating Officer, Centers for Disease Control and Prevention.

[FR Doc. 2024–07849 Filed 4–12–24; 8:45 am]

BILLING CODE 4163–18–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

[CMS 3453–FN]

Medicare Program; Application by the Accreditation Commission for Health Care (ACHC) for Continued CMS Approval of Its Home Infusion Therapy (HIT) Accreditation Program

AGENCY: Centers for Medicare & Medicaid Services (CMS), Health and Human Services (HHS).

ACTION: Final Notice.

SUMMARY: This final notice announces our decision to approve the Accreditation Commission for Health Care (ACHC) for continued recognition as a national accrediting organization that accredits suppliers of home infusion therapy (HIT) services that wish to participate in the Medicare or Medicaid programs.

DATES: The approval announced in this final notice is effective April 23, 2024, through April 23, 2030.

FOR FURTHER INFORMATION CONTACT: Shannon Freeland, (410) 786–4348, *shannon.freeland@cms.hhs.gov.*

SUPPLEMENTARY INFORMATION:

I. Background

Home infusion therapy (HIT) is a treatment option for Medicare beneficiaries with a wide range of acute and chronic conditions. Section 5012 of the 21st Century Cures Act (Pub. L. 114–255, enacted December 13, 2016) added section 1861(iii) to the Social Security Act (the Act), establishing a new Medicare benefit for HIT services. Section 1861(iii)(1) of the Act defines ''home infusion therapy'' as professional services, including nursing services; training and education not otherwise covered under the Durable Medical Equipment (DME) benefit; remote monitoring; and other monitoring services. Home infusion therapy must be furnished by a qualified HIT supplier and furnished in the individual's home. Sections 1861(iii)(A) and (B) of the Act require that the individual (patient) must:

- Be under the care of an applicable provider (that is, physician, nurse practitioner, or physician assistant); and
- Have a plan of care established and periodically reviewed by a physician in coordination with the furnishing of home infusion drugs under Part B, which prescribes the type, amount, and duration of infusion therapy services that are to be furnished.

Section 1861(iii)(3)(D)(i)(III) of the Act requires that a qualified HIT supplier be accredited by an accrediting organization (AO) designated by the Secretary in accordance with section 1834(u)(5) of the Act.

Section 1834(u)(5)(A) of the Act identifies factors for designating HIT AOs and in reviewing and modifying the list of designated HIT AOs. These statutory factors are as follows:

- The ability of the accrediting organization to conduct timely reviews of HIT accreditation applications.
- The ability of the accrediting organization to take into account the capacities of HIT suppliers located in a rural area (as defined in section 1886(d)(2)(D) of the Act).
- Whether the accrediting organization has established reasonable fees to be charged to HIT suppliers applying for accreditation.
- Such other factors as the Secretary determines appropriate.

Section 1834(u)(5)(B) of the Act requires the Secretary to designate AOs to accredit HIT suppliers furnishing HIT no later than January 1, 2021. Section 1861(iii)(3)(D)(i)(III) of the Act requires a ''qualified home infusion therapy supplier'' to be accredited by a CMS-approved AO, in accordance with section 1834(u)(5) of the Act.

The current term of approval for the Accreditation Commission for Health Care (ACHC) Home Infusion Therapy accreditation program expires April 23, 2024.

II. Approval of Deeming Organization

Section 1834(u)(5) of the Act and regulations at 42 CFR 488.1010 require that our findings concerning review and approval of a national accrediting organization's requirements consider, among other factors, the applying accrediting organization's requirements for accreditation; survey procedures; resources for conducting required surveys; capacity to furnish information for use in enforcement activities; monitoring procedures for provider entities found not in compliance with the conditions or requirements; and ability to provide CMS with the necessary data.

Our rules at 42 CFR 488.1020(a) require that we publish, after receipt of an organization's complete application, a notice identifying the national accrediting body making the request, describing the nature of the request, and providing at least a 30-day public comment period. In accordance with our rules at 42 CFR 488.1010(d), we have 210 days from the receipt of a complete application to publish notice of approval or denial of the application.

III. Provisions of the Proposed Notice

In the November 24, 2023 **Federal Register** (88 FR 82377), we published a proposed notice announcing ACHC's request for continued recognition as a national accrediting organization for suppliers providing home infusion therapy (HIT) services that wish to participate in the Medicare or Medicaid programs. In that proposed notice, we detailed our evaluation criteria. Under section 1834(u)(5) of the Act and in our regulations at 42 CFR 488.1010, we conducted a review of ACHC's Medicare HIT accreditation application in accordance with the criteria specified by our regulations, which include, but are not limited to, the following:

- An administrative review of ACHC's:
  - ++ Corporate policies;
  - ++ Financial and human resources available to accomplish the proposed surveys;
  - ++ Procedures for training, monitoring, and evaluation of its HIT surveyors;
  - ++ Ability to investigate and respond appropriately to complaints against accredited HITs; and
  - ++ Survey review and decision-making process for accreditation.
- The equivalency of ACHC's standards for HIT as compared with CMS' HIT conditions for participation.
- ACHC's survey process to determine the following:
  - ++ The composition of the survey team, surveyor qualifications, and the ability of the organization to provide continuing surveyor training;
  - ++ The comparability of ACHC's to CMS' standards and processes, including survey frequency, and the ability to investigate and respond appropriately to complaints against accredited facilities;
  - ++ ACHC's processes and procedures for monitoring a HIT supplier found out of compliance with ACHC's program requirements;
  - ++ ACHC's capacity to report deficiencies to the surveyed HIT facilities and respond to the facility's evidence of standards compliance in a timely manner;
  - ++ ACHC's capacity to provide CMS with electronic data and reports necessary for effective assessment and interpretation of the organization's survey process;
  - ++ ACHC's capacity to adequately fund required surveys;
  - ++ ACHC's policies with respect to whether surveys are announced or unannounced, to ensure that surveys are unannounced; and
  - ++ ACHC's agreement to provide CMS with a copy of the most current accreditation survey together with any other information related to the survey as CMS may require (including corrective action plans or ACHC's evidence of standards compliance.)
- The adequacy of ACHC's staff and other resources, and its financial viability.
- ACHC's agreement or policies for voluntary and involuntary termination of suppliers.
- ACHC's agreement or policies for voluntary and involuntary termination of the HIT AO program.
- ACHC's policies and procedures to avoid conflicts of interest, including the appearance of conflicts of interest, involving individuals who conduct surveys or participate in accreditation decisions.

IV. Analysis of and Responses to Public Comments on the Proposed Notice

In accordance with section 1834(u)(5) of the Act, the November 24, 2023, proposed notice also solicited public comments regarding whether ACHC's requirements met or exceeded the Medicare conditions for participation for HIT. No comments were received in response to our proposed notice.

V. Provisions of the Final Notice

A. Differences Between ACHC's Standards and Requirements for Accreditation and Medicare Conditions and Survey Requirements

We compared ACHC's HIT accreditation requirements and survey process with the Medicare Conditions for Coverage of 42 CFR part 486, and the survey and certification process requirements of part 488. Our review and evaluation of ACHC's HIT application, which were conducted as described in section III. of this final notice, yielded the following areas where, as of the date of this notice, ACHC has completed revising its standards and certification processes to meet the conditions at §§ 486.500 to 486.525.

- Section 486.520(a), to address the requirement of all patients must be under the care of an applicable provider.
- Section 486.520(b), to address the requirement that the plan of care must be established by a physician prescribing the type, amount, and duration for HIT.
- Section 486.520(c), to address the requirement that the plan of care must be periodically reviewed by the physician.
- Section 486.525(a), to address the requirement that the HIT suppliers to be available 7 days a week, 24 hours a day

basis in accordance with the plan of care.

- Section 486.525(a)(1), to provide professional services, including nursing services.
- Section 486.525(a)(2), to address the requirement for patient education and training to be available for patients on a 7 day a week, 24 hour a day basis in accordance with the plan of care.
- Section 486.525(a)(3), to address the requirement of remote monitoring for the provision of HIT and home infusion drugs.

B. Term of Approval

Based on the review and observations described in section III. of this final notice, we have determined that ACHC's requirements for HITs meet or exceed our requirements. Therefore, we approve ACHC as a national accreditation organization for HITs that request participation in the Medicare program, effective April 23, 2024 through April 23, 2030.

VI. Collection of Information Requirements

This document does not impose information collection requirements, that is, reporting, recordkeeping, or third-party disclosure requirements. Consequently, there is no need for review by the Office of Management and Budget under the authority of the Paperwork Reduction Act of 1995 (44 U.S.C. chapter 35).

The Administrator of the Centers for Medicare & Medicaid Services (CMS), Chiquita Brooks-LaSure, having reviewed and approved this document, authorizes Trenesha Fultz-Mimms, who is the Federal Register Liaison, to electronically sign this document for purposes of publication in the **Federal Register**.

Trenesha Fultz-Mimms,

Federal Register Liaison, Centers for Medicare & Medicaid Services.

[FR Doc. 2024–07884 Filed 4–12–24; 8:45 am]

BILLING CODE 4120–01–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health

National Institute on Drug Abuse; Notice of Closed Meeting

Pursuant to section 1009 of the Federal Advisory Committee Act, as amended, notice is hereby given of the following meeting.

The meeting will be closed to the public in accordance with the provisions set forth in sections 552b(c)(4) and 552b(c)(6), Title 5 U.S.C., as amended. The grant applications and the discussions could disclose confidential trade secrets or commercial property such as patentable material, and personal information concerning individuals associated with the grant applications, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy.

Name of Committee: National Institute on Drug Abuse Special Emphasis Panel; NIDA REI-Reaching Equity at the Intersection of HIV and Substance Use: Novel Approaches to Address HIV Related Health Disparities in Minority Populations.

Date: April 26, 2024.

Time: 3:30 p.m. to 4:15 p.m.

Agenda: To review and evaluate grant applications.

Place: National Institute of Health, National Institute on Drug Abuse, 301 North Stonestreet Avenue, Bethesda, MD 20892, (Virtual Meeting).

Contact Person: Sudhirkumar U. Yanpallewar, M.D., Scientific Review Officer, Scientific Review Branch, National Institute on Drug Abuse, NIH 301 North Stonestreet Avenue, Bethesda, MD 20892, (301) 443–4577, *sudhirkumar.yanpallewar@nih.gov.*

This notice is being published less than 15 days prior to the meeting due to the timing limitations imposed by the review and funding cycle.

(Catalogue of Federal Domestic Assistance Program Nos. 93.277, Drug Abuse Scientist Development Award for Clinicians, Scientist Development Awards, and Research Scientist Awards; 93.278, Drug Abuse National Research Service Awards for Research Training; 93.279, Drug Abuse and Addiction Research Programs, National Institutes of Health, HHS)

Dated: April 10, 2024.

Lauren A. Fleck,

Program Analyst, Office of Federal Advisory Committee Policy.

[FR Doc. 2024–07885 Filed 4–12–24; 8:45 am]

BILLING CODE 4140–01–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Immigration and Customs Enforcement

[Docket No. ICEB–2024–0005]

RIN 1653–ZA49

Employment Authorization for Certain Palestinian F–1 Nonimmigrant Students Experiencing Severe Economic Hardship as a Direct Result of the Current Humanitarian Crisis in the Palestinian Territories

AGENCY: U.S. Immigration and Customs Enforcement; Department of Homeland Security.

ACTION: Notice.

SUMMARY: The Department of Homeland Security (DHS) is suspending certain regulatory requirements for certain Palestinian F–1 nonimmigrant students who are experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories. The Secretary is providing relief to these students who are in lawful F–1 nonimmigrant status, so the students may request employment authorization, work an increased number of hours while school is in session, and reduce their course load while continuing to maintain their F–1 nonimmigrant status.

DATES: This action for certain Palestinian F–1 nonimmigrant students covered by this notice began on February 14, 2024, and ends on August 13, 2025.

FOR FURTHER INFORMATION CONTACT: Sharon Snyder, Unit Chief, Policy and Response Unit, Student and Exchange Visitor Program, MS 5600, U.S. Immigration and Customs Enforcement (ICE), 500 12th Street SW, Washington, DC 20536–5600; email: *sevp@ice.dhs.gov,* telephone: (703) 603–3400. This is not a toll-free number. Program information can be found at *https://www.ice.gov/sevis/.*

SUPPLEMENTARY INFORMATION: For the purposes of this Notice, ICE intends to cover non-U.S. citizens of any nationality, or without nationality, who are Palestinian. F–1 nonimmigrant students who possesses any of the following authentic documents,[1] though not limited to the list below, regardless of the document's validity period [2] or expiration may be eligible for this relief:

- a Palestinian Authority Passport;
- a Palestinian Authority Identification Card;
- a Birth Certificate or Birth Extract verified or issued by a recognized governmental authority identifying the holder as having been born in the Palestinian Territories;
- an identification document issued by a third country, the United Nations, its specialized agencies and related organizations, or the International Committee of the Red Cross, indicating the holder is a Palestinian; or
- a travel document issued by a third country, the United Nations, its

[1] On June 14, 2007, Hamas, designated as a foreign terrorist organization by the Secretary of State in accordance with INA section 219, took de facto administrative control of Gaza, including issuance of civil documents for the territory. Identity documents issued by Hamas after June 14, 2007, will not be accepted, unless verified by the Palestinian Authority in the West Bank.

[2] The term validity period is used in reference to the length of time a document can be used for purposes of travel or identification prior to the expiration date.

specialized agencies and related organizations, or the International Committee of the Red Cross, identifying the holder as a Palestinian.

What action is DHS taking under this notice?

The Secretary is exercising the authority under 8 CFR 214.2(f)(9) to temporarily suspend the applicability of certain requirements governing on-campus and off-campus employment for certain F–1 nonimmigrant students who are Palestinian, who were lawfully present in the United States in F–1 nonimmigrant student status as of February 14, 2024, and who are experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories. Effective with this publication, suspension of the employment limitations is available through August 13, 2025, for those who were in lawful F–1 nonimmigrant status on February 14, 2024. DHS will deem an F–1 nonimmigrant student granted employment authorization through this notice to be engaged in a ''full course of study'' for the duration of the employment authorization, if the student satisfies the minimum course load set forth in this notice.[3] *See* 8 CFR 214.2(f)(6)(i)(F).

Who is covered by this notice?

This notice applies exclusively to F–1 nonimmigrant students who meet all of the following conditions:

(1) Possesses any authentic document described in the Supplementary Information section of this Notice;

(2) Were lawfully present in the United States on February 14, 2024, in F–1 nonimmigrant status under section 101(a)(15)(F)(i) of the Immigration and Nationality Act (INA), 8 U.S.C. 1101(a)(15)(F)(i);

(3) Are enrolled in an academic institution that is Student and Exchange Visitor Program (SEVP)-certified for enrollment for F–1 nonimmigrant students;

(4) Are currently maintaining F–1 nonimmigrant status; and

(5) Are experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories.

This notice applies to F–1 nonimmigrant students in an approved private school in kindergarten through grade 12, public school grades 9 through 12, and undergraduate and graduate education. An F–1 nonimmigrant student covered by this notice who transfers to another SEVP-certified academic institution remains eligible for the relief provided by means of this notice.

Why is DHS taking this action?

DHS is taking action to provide relief to certain Palestinian F–1 nonimmigrant students experiencing severe economic hardship due to the current humanitarian crisis in the Palestinian Territories. Based on its review of the conditions in the Palestinian Territories and input received from the U.S. Department of State (DOS), DHS is taking action to allow certain eligible Palestinian F–1 nonimmigrant students to request employment authorization, work an increased number of hours while school is in session, and reduce their course load while continuing to maintain F–1 nonimmigrant student status.

On February 14, 2024, President Joseph Biden issued a memorandum to the Secretary of State and the Secretary of DHS to defer for 18 months the removal of certain Palestinians present in the United States by implementing Deferred Enforced Departure (DED) for those eligible individuals.[4] This action came in the wake of the October 7, 2023, terrorist attack by Hamas against Israel, and Israel's ensuing military response, which has resulted in the humanitarian conditions in the Palestinian Territories, primarily Gaza, significantly deteriorating. Because of these conditions, DHS is now taking action so eligible Palestinian F–1 nonimmigrant students may request employment authorization, work an increased number of hours while school is in session, and reduce their course load while continuing to maintain F–1 nonimmigrant student status.

What is the minimum course load requirement to maintain valid F–1 nonimmigrant status under this notice?

Undergraduate F–1 nonimmigrant students who receive on-campus or off-campus employment authorization under this notice must remain registered for a minimum of six semester or quarter hours of instruction per academic term. Undergraduate F–1 nonimmigrant students enrolled in a term of different duration must register for at least one half of the credit hours normally required under a ''full course of study.'' *See* 8 CFR 214.2(f)(6)(i)(B) and (F). A graduate-level F–1 nonimmigrant student who receives on-campus or off-campus employment authorization under this notice must remain registered for a minimum of three semester or quarter hours of instruction per academic term. *See* 8 CFR 214.2(f)(5)(v). Nothing in this notice affects the applicability of other minimum course load requirements set by the academic institution.

In addition, an F–1 nonimmigrant student (either undergraduate or graduate) granted on-campus or off-campus employment authorization under this notice may count up to the equivalent of one class or three credits per session, term, semester, trimester, or quarter of online or distance education toward satisfying this minimum course load requirement, unless their course of study is in an English language study program. *See* 8 CFR 214.2(f)(6)(i)(G). An F–1 nonimmigrant student attending an approved private school in kindergarten through grade 12 or public school in grades 9 through 12 must maintain ''class attendance for not less than the minimum number of hours a week prescribed by the school for normal progress toward graduation,'' as required under 8 CFR 214.2(f)(6)(i)(E). Nothing in this notice affects the applicability of federal and state labor laws limiting the employment of minors.

May an eligible F–1 nonimmigrant student who already has on-campus or off-campus employment authorization benefit from the suspension of regulatory requirements under this notice?

Yes. An F–1 nonimmigrant student who is Palestinian, who already has on-campus or off-campus employment authorization and is otherwise eligible may benefit under this notice, which suspends certain regulatory requirements relating to the minimum course load requirement under 8 CFR 214.2(f)(6)(i) and certain employment eligibility requirements under 8 CFR 214.2(f)(9). Such an eligible F–1 nonimmigrant student may benefit without having to apply for a new Form I–766, Employment Authorization Document (EAD). To benefit from this notice, the F–1 nonimmigrant student must request that their designated school official (DSO) enter the following statement in the remarks field of the

[3] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the end of any academic term for which such student is matriculated as of August 14, 2025, provided the student satisfies the minimum course load requirements in this notice.

[4] Memorandum on the Deferred Enforced Departure for Certain Palestinians, The White House, Feb. 14, 2024, available at *https://www.whitehouse.gov/briefing-room/presidential-actions/2024/02/14/memorandum-on-the-deferred-enforced-departure-for-certain-palestinians/* (last visited Feb. 27, 2024).

student's Student and Exchange Visitor Information System (SEVIS) record, which the student's Form I–20, Certificate of Eligibility for Nonimmigrant (F–1) Student Status, will reflect:

Approved for more than 20 hours per week of [DSO must insert ''on-campus'' or ''off-campus,'' depending upon the type of employment authorization the student already has] employment authorization and reduced course load under the Special Student Relief authorization from [DSO must insert the beginning date of the notice or the beginning date of the student's employment, whichever date is later] until [DSO must insert either the student's program end date, the current EAD expiration date (if the student is currently authorized for off-campus employment), or the end date of this notice, whichever date comes first].[5]

Must the F–1 nonimmigrant student apply for reinstatement after expiration of this special employment authorization if the student reduces his or her ''full course of study''?

No. DHS will deem an F–1 nonimmigrant student who receives and comports with the employment authorization permitted under this notice to be engaged in a ''full course of study'' [6] for the duration of the student's employment authorization, provided that a qualifying undergraduate level F–1 nonimmigrant student remains registered for a minimum of six semester or quarter hours of instruction per academic term, and a qualifying graduate level F–1 nonimmigrant student remains registered for a minimum of three semester or quarter hours of instruction per academic term. *See* 8 CFR 214.2(f)(5)(v) and (f)(6)(i)(F). Undergraduate F–1 nonimmigrant students enrolled in a term of different duration must register for at least one half of the credit hours normally required under a ''full course of study.'' *See* 8 CFR 214.2(f)(6)(i)(B) and (F). DHS will not require such students to apply for reinstatement under 8 CFR 214.2(f)(16) if they are otherwise maintaining F–1 nonimmigrant status.

Will an F–2 dependent (spouse or minor child) of an F–1 nonimmigrant student covered by this notice be eligible for employment authorization?

No. An F–2 spouse or minor child of an F–1 nonimmigrant student is not authorized to work in the United States and, therefore, may not accept employment while in F–2 nonimmigrant status. *See* 8 CFR 214.2(f)(15)(i).

Will the suspension of the applicability of the standard student employment requirements apply to an individual who received an initial F–1 visa and makes an initial entry into the United States after the effective date of this notice in the **Federal Register***?*

No. The suspension of the applicability of the standard regulatory requirements only applies to certain F–1 nonimmigrant students who meet the following conditions:

(1) Possesses any authentic document described in the **SUPPLEMENTARY INFORMATION** section of this Notice;

(2) Were lawfully present in the United States on February 14, 2024, in F–1 nonimmigrant status under section 101(a)(15)(F)(i) of the Immigration and Nationality Act (INA), 8 U.S.C. 1101(a)(15)(F)(i);

(3) Are enrolled in an academic institution that is Student and Exchange Visitor Program (SEVP)-certified for enrollment for F–1 nonimmigrant students;

(4) Are currently maintaining F–1 nonimmigrant status; and

(5) Are experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories.

An F–1 nonimmigrant student who does not meet all these requirements is ineligible for the suspension of the applicability of the standard regulatory requirements (even if experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories).

Does this notice apply to a continuing F–1 nonimmigrant student who departs the United States after the effective date of this notice in the **Federal Register** *and who needs to obtain a new F–1 visa before returning to the United States to continue an educational program?*

Yes. This notice applies to such an F–1 nonimmigrant student, but only if the DSO has properly notated the student's SEVIS record, which will then appear on the student's Form I–20. The normal rules for visa issuance remain applicable to a nonimmigrant who needs to apply for a new F–1 visa to continue an educational program in the United States.

Does this notice apply to elementary school, middle school, and high school students in F–1 status?

Yes. However, this notice does not by itself reduce the required course load for Palestinian F–1 nonimmigrant students enrolled in kindergarten through grade 12 at a private school, or grades 9 through 12 at a public high school. Such students must maintain the minimum number of hours of class attendance per week prescribed by the academic institution for normal progress toward graduation, as required under 8 CFR 214.2(f)(6)(i)(E). The suspension of certain regulatory requirements related to employment through this notice is applicable to all eligible F–1 nonimmigrant students regardless of educational level. Eligible Palestinian F–1 nonimmigrant students enrolled in an elementary school, middle school, or high school do benefit from the suspension of the requirement in 8 CFR 214.2(f)(9)(i) that limits on-campus employment to 20 hours per week while school is in session.

On-Campus Employment Authorization

Will an F–1 nonimmigrant student who receives on-campus employment authorization under this notice be authorized to work more than 20 hours per week while school is in session?

Yes. For an F–1 nonimmigrant student covered in this notice, the Secretary is suspending the applicability of the requirement in 8 CFR 214.2(f)(9)(i) that limits an F–1 nonimmigrant student's on-campus employment to 20 hours per week while school is in session. An eligible F–1 nonimmigrant student has authorization to work more than 20 hours per week while school is in session if the DSO has entered the following statement in the remarks field of the student's SEVIS record, which will be reflected on the student's Form I–20:

Approved for more than 20 hours per week of on-campus employment and reduced course load, under the Special Student Relief authorization from [DSO must insert the beginning date of this notice or the beginning date of the student's employment, whichever date is later] until [DSO must insert the student's program end date or the end date of this notice, whichever date comes first].[7]

[5] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the end of any academic term for which such student is matriculated as of August 14, 2025, provided the student satisfies the minimum course load requirements in this notice.

[6] *See* 8 CFR 214.2(f)(6).

[7] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the

To obtain on-campus employment authorization, the F–1 nonimmigrant student must demonstrate to the DSO that the employment is necessary to avoid severe economic hardship directly resulting from the current humanitarian crisis in the Palestinian Territories. An F–1 nonimmigrant student authorized by the DSO to engage in on-campus employment by means of this notice does not need to file any applications with U.S. Citizenship and Immigration Services (USCIS). The standard rules permitting full-time employment on-campus when school is not in session or during school vacations apply, as described in 8 CFR 214.2(f)(9)(i).

Will an F–1 nonimmigrant student who receives on-campus employment authorization under this notice have authorization to reduce the normal course load and still maintain his or her F–1 nonimmigrant student status?

Yes. DHS will deem an F–1 nonimmigrant student who receives on-campus employment authorization under this notice to be engaged in a ''full course of study'' [8] for the purpose of maintaining their F–1 nonimmigrant student status for the duration of the on-campus employment, if the student satisfies the minimum course load requirement described in this notice, consistent with 8 CFR 214.2(f)(6)(i)(F). However, the authorization to reduce the normal course load is solely for DHS purposes of determining valid F–1 nonimmigrant student status. Nothing in this notice mandates that school officials allow an F–1 nonimmigrant student to take a reduced course load if the reduction would not meet the academic institution's minimum course load requirement for continued enrollment.[9]

Off-Campus Employment Authorization

What regulatory requirements does this notice temporarily suspend relating to off-campus employment?

For an F–1 student covered by this notice, as provided under 8 CFR 214.2(f)(9)(ii)(A), the Secretary is suspending the following regulatory requirements relating to off-campus employment:

(a) The requirement that a student must have been in F–1 nonimmigrant student status for one full academic year to be eligible for off-campus employment;

(b) The requirement that an F–1 nonimmigrant student must demonstrate that acceptance of employment will not interfere with the student's carrying a full course of study;

(c) The requirement that limits an F–1 nonimmigrant student's employment authorization to no more than 20 hours per week of off-campus employment while the school is in session; and

(d) The requirement that the student demonstrate that employment under 8 CFR 214.2(f)(9)(i) is unavailable or otherwise insufficient to meet the needs that have arisen as a result of the unforeseen circumstances.

Will an F–1 nonimmigrant student who receives off-campus employment authorization under this notice have authorization to reduce the normal course load and still maintain F–1 nonimmigrant status?

Yes. DHS will deem an F–1 nonimmigrant student who receives off-campus employment authorization by means of this notice to be engaged in a ''full course of study'' [10] for the purpose of maintaining F–1 nonimmigrant student status for the duration of the student's employment authorization if the student satisfies the minimum course load requirement described in this notice, consistent with 8 CFR 214.2(f)(6)(i)(F). The authorization for a reduced course load is solely for DHS purposes of determining valid F–1 nonimmigrant student status. Nothing in this notice mandates that school officials allow an F–1 nonimmigrant student to take a reduced course load if such reduced course load would not meet the school's minimum course load requirement.[11]

How may an eligible F–1 nonimmigrant student obtain employment authorization for off-campus employment with a reduced course load under this notice?

An F–1 nonimmigrant student must file a Form I–765, Application for Employment Authorization, with USCIS to apply for off-campus employment authorization based on severe economic hardship directly resulting from the current humanitarian crisis in the Palestinian Territories.[12] Filing instructions are located at *https://www.uscis.gov/i-765.*

Fee considerations. Submission of a Form I–765 currently requires payment of a $520 fee. An applicant who is unable to pay the fee may submit a completed Form I–912, Request for Fee Waiver, along with the Form I–765, Application for Employment Authorization. *See https://www.uscis.gov/i-912.* The submission must include an explanation about why USCIS should grant the fee waiver and the reason(s) for the inability to pay, and any evidence to support the reason(s). *See* 8 CFR 106.2 and 106.3.

Supporting documentation. An F–1 nonimmigrant student seeking off-campus employment authorization due to severe economic hardship must demonstrate the following to their DSO:

(1) This employment is necessary to avoid severe economic hardship; and

(2) The hardship is a direct result of the current humanitarian crisis in the Palestinian Territories.

If the DSO agrees that the F–1 nonimmigrant student is entitled to receive such employment authorization, the DSO must recommend application approval to USCIS by entering the following statement in the remarks field of the student's SEVIS record, which will then appear on that student's Form I–20:

> Recommended for off-campus employment authorization in excess of 20 hours per week and reduced course load under the Special Student Relief authorization from the date of the USCIS authorization noted on Form I–766 until [DSO must insert the program end date or the end date of this notice, whichever date comes first].[13]

The F–1 nonimmigrant student must then file the properly endorsed Form I–20 and Form I–765 according to the instructions for the Form I–765. The F–1 nonimmigrant student may begin working off-campus only upon receipt of the EAD from USCIS.

DSO recommendation. In making a recommendation that an F–1 nonimmigrant student be approved for Special Student Relief, the DSO certifies that:

(a) The F–1 nonimmigrant student is in good academic standing and is

end of any academic term for which such student is matriculated as of August 14, 2025, provided the student satisfies the minimum course load requirements in this notice.

[8] *See* 8 CFR 214.2(f)(6).

[9] Minimum course load requirement for enrollment in a school must be established in a publicly available document (*e.g.,* catalog, website, or operating procedure), and it must be a standard applicable to all students (U.S. citizens and foreign students) enrolled at the school.

[10] *See* 8 CFR 214.2(f)(6).

[11] Minimum course load requirement for enrollment in a school must be established in a publicly available document (*e.g.,* catalog, website, or operating procedure), and it must be a standard applicable to all students (U.S. citizens and foreign students) enrolled at the school.

[12] *See* 8 CFR 274a.12(c)(3)(iii).

[13] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the end of any academic term for which such student is matriculated as of August 14, 2025, provided the student satisfies the minimum course load requirements in this notice.

carrying a ''full course of study'' [14] at the time of the request for employment authorization;

(b) The F–1 nonimmigrant student is a Palestinian, and is experiencing severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories, as documented on the Form I–20;

(c) The F–1 nonimmigrant student has confirmed that the student will comply with the reduced course load requirements of this notice and register for the duration of the authorized employment for a minimum of six semester or quarter hours of instruction per academic term if at the undergraduate level, or for a minimum of three semester or quarter hours of instruction per academic term if at the graduate level; [15] and

(d) The off-campus employment is necessary to alleviate severe economic hardship to the individual as a direct result of the current humanitarian crisis in the Palestinian Territories.

Processing. To facilitate prompt adjudication of the student's application for off-campus employment authorization under 8 CFR 214.2(f)(9)(ii)(C), the F–1 nonimmigrant student should do both of the following:

(a) Ensure that the application package includes all of the following documents:

(1) A completed Form I–765 with all applicable supporting evidence;

(2) The required fee or properly documented fee waiver request as defined in 8 CFR 106.2 and 106.3; and

(3) A signed and dated copy of the student's Form I–20 with the appropriate DSO recommendation, as previously described in this notice; and

(b) Send the application in an envelope which is clearly marked on the front of the envelope, bottom right-hand side, with the phrase ''SPECIAL STUDENT RELIEF.'' [16] Failure to include this notation may result in significant processing delays.

If USCIS approves the student's Form I–765, USCIS will send the student a Form I–766 EAD as evidence of employment authorization. The EAD will contain an expiration date that does not exceed the end of the granted temporary relief.

[14] *See* 8 CFR 214.2(f)(6).

[15] 8 CFR 214.2(f)(5)(v).

[16] Guidance for direct filing addresses can be found here: *https://www.uscis.gov/i-765-addresses.*

Deferred Enforced Departure (DED) Considerations

Can an F–1 nonimmigrant student apply for a DED-related EAD and for benefits under this notice at the same time?

Yes. Although they are not required to apply for a DED-related EAD, if an eligible F–1 nonimmigrant student wants to obtain such an EAD, the student must file Form I–765 and pay the related fee (or request a fee waiver). The F–1 student may also apply for Special Student Relief under this notice by requesting that the DSO notate on their Form I–20 in SEVIS that the student has been authorized to carry a reduced course load and is permitted to work an increased number of hours under Special Student Relief while school is in session. The DSO should also notate on the Form I–20 that the student is working pursuant to a DED-related EAD. As long as the F–1 nonimmigrant student maintains the minimum course load described in this notice, does not otherwise violate the student's nonimmigrant status, including as provided under 8 CFR 214.1(g), and remains covered under DED, then the student maintains F–1 nonimmigrant status and DED concurrently.

When a student applies simultaneously for a DED-related EAD and benefits under this notice, what is the minimum course load requirement while an application for employment authorization is pending?

The F–1 nonimmigrant student must maintain normal course load requirements for a ''full course of study'' [17] unless or until the F–1 nonimmigrant student is granted employment authorization under this notice. DED-related employment authorization, by itself, does not authorize a nonimmigrant student to drop below twelve credit hours, or otherwise applicable minimum requirements (*e.g.,* clock hours for non-traditional academic programs). Once approved for a DED-related EAD and Special Student Relief employment authorization, as indicated by the DSO's required entry in SEVIS and issuance of an updated Form I–20, the F–1 nonimmigrant student may drop below twelve credit hours, or otherwise applicable minimum requirements (with a minimum of six semester or quarter hours of instruction per academic term if the student is at the undergraduate level, or a minimum of three semester or quarter hours of instruction per academic term if the student is at the graduate level). *See* 8 CFR 214.2(f)(5)(v), 214.2(f)(6), 214.2(f)(9)(i) and (ii).

[17] *See* 8 CFR 214.2(f)(6).

How does an F–1 student who has received a DED-related EAD then apply for authorization to take a reduced course load under this notice?

There is no further application process with USCIS if a student has been approved for a DED-related EAD. However, the F–1 nonimmigrant student must demonstrate and provide documentation to the DSO of severe economic hardship as a direct result of the current humanitarian crisis in the Palestinian Territories. The DSO will then verify and update the student's SEVIS record to enable the F–1 nonimmigrant student with DED to reduce their course load without any further action or application. No other EAD needs to be issued for the F–1 nonimmigrant student to have employment authorization.

Can a noncitizen who has been granted a DED-related EAD apply for reinstatement to F–1 nonimmigrant student status after the noncitizen's F–1 nonimmigrant student status has lapsed?

Yes. Current regulations permit certain students who fall out of F–1 nonimmigrant student status to apply for reinstatement. *See* 8 CFR 214.2(f)(16). This provision might apply to students who worked on a DED-related EAD or dropped their course load before February 14, 2024, and therefore fell out of F–1 nonimmigrant status. The student must satisfy the criteria set forth in the F–1 nonimmigrant student status reinstatement regulations.

How long will this notice remain in effect?

This notice grants temporary relief through August 13, 2025,[18] to eligible F–1 nonimmigrant students. DHS will continue to monitor the situation in the Palestinian Territories. Should the special provisions authorized by this notice need modification or extension, DHS will announce such changes in the **Federal Register**.

[18] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the end of any academic term for which such student is matriculated as of August 14, 2025, provided the student satisfies the minimum course load requirement in this notice.

Paperwork Reduction Act (PRA)

An F–1 nonimmigrant student seeking off-campus employment authorization due to severe economic hardship resulting from the current humanitarian crisis in the Palestinian Territories must demonstrate to the DSO that this employment is necessary to avoid severe economic hardship. A DSO who agrees that a nonimmigrant student should receive such employment authorization must recommend an application approval to USCIS by entering information in the remarks field of the student's SEVIS record. The authority to collect this information is in the SEVIS collection of information currently approved by the Office of Management and Budget (OMB) under OMB Control Number 1653–0038.

This notice also allows an eligible F–1 nonimmigrant student to request employment authorization, work an increased number of hours while the academic institution is in session, and reduce their course load while continuing to maintain F–1 nonimmigrant student status.

To apply for employment authorization, certain F–1 nonimmigrant students must complete and submit a currently approved Form I–765 according to the instructions on the form. OMB has previously approved the collection of information contained on the current Form I–765, consistent with the PRA (OMB Control No. 1615–0040). Although there will be a slight increase in the number of Form I–765 filings because of this notice, the number of filings currently contained in the OMB annual inventory for Form I–765 is sufficient to cover the additional filings. Accordingly, there is no further action required under the PRA.

Alejandro Mayorkas,

Secretary, U.S. Department of Homeland Security.

[FR Doc. 2024–07869 Filed 4–12–24; 11:15 am]

BILLING CODE 9111–CB–P

DEPARTMENT OF HOMELAND SECURITY

U.S. Immigration and Customs Enforcement

[Docket No. ICEB–2024–0004]

RIN 1653–ZA48

Employment Authorization for Ethiopian F–1 Nonimmigrant Students Experiencing Severe Economic Hardship as a Direct Result of the Current Armed Conflict and the Current Humanitarian Crisis in Ethiopia

AGENCY: U.S. Immigration and Customs Enforcement; Department of Homeland Security.

ACTION: Notice.

SUMMARY: The Department of Homeland Security is suspending certain regulatory requirements for F–1 nonimmigrant students from Ethiopia who are experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia. The Secretary is providing relief to these students who are in lawful F–1 nonimmigrant status, so the students may request employment authorization, work an increased number of hours while school is in session, and reduce their course load while continuing to maintain their F–1 nonimmigrant status.

DATES: This action is effective June 13, 2024, through December 12, 2025.

FOR FURTHER INFORMATION CONTACT: Sharon Snyder, Unit Chief, Policy and Response Unit, Student and Exchange Visitor Program, MS 5600, U.S. Immigration and Customs Enforcement, 500 12th Street SW, Washington, DC 20536–5600; email: *sevp@ice.dhs.gov,* telephone: (703) 603–3400. This is not a toll-free number. Program information can be found at *https://www.ice.gov/sevis/.*

SUPPLEMENTARY INFORMATION:

What action is DHS taking under this notice?

The Secretary is exercising authority under 8 CFR 214.2(f)(9) to temporarily suspend the applicability of certain requirements governing on-campus and off-campus employment for F–1 nonimmigrant students whose country of citizenship is Ethiopia regardless of country of birth (or individuals having no nationality who last habitually resided in Ethiopia), who are present in the United States in lawful F–1 nonimmigrant student status on the date of publication of this notice, and who are experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia. The original notice, which applied to F–1 nonimmigrant students who met certain criteria, including having been lawfully present in the United States in F–1 nonimmigrant status on December 12, 2022, was effective from December 12, 2022, through June 12, 2024. *See* 87 FR 76068 (Dec. 12, 2022). Effective with this publication, suspension of the employment limitations is available through December 12, 2025, for those who are in lawful F–1 nonimmigrant status on the date of publication of this notice. DHS will deem an F–1 nonimmigrant student granted employment authorization through this Notice to be engaged in a ''full course of study'' for the duration of the employment authorization, if the student satisfies the minimum course load set forth in this notice.[1] *See* 8 CFR 214.2(f)(6)(i)(F).

Who is covered by this notice?

This notice applies exclusively to F–1 nonimmigrant students who meet all of the following conditions:

(1) Are a citizen of Ethiopia regardless of country of birth (or an individual having no nationality who last habitually resided in Ethiopia);

(2) Were lawfully present in the United States on the date of publication of this notice in F–1 nonimmigrant status under section 101(a)(15)(F)(i) of the Immigration and Nationality Act (INA), 8 U.S.C. 1101(a)(15)(F)(i);

(3) Are enrolled in an academic institution that is Student and Exchange Visitor Program (SEVP)-certified for enrollment for F–1 nonimmigrant students;

(4) Are currently maintaining F–1 nonimmigrant status; and

(5) Are experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia.

This notice applies to F–1 nonimmigrant students in an approved private school in kindergarten through grade 12, public school grades 9 through 12, and undergraduate and graduate education. An F–1 nonimmigrant student covered by this notice who

[1] Because the suspension of requirements under this notice applies throughout an academic term during which the suspension is in effect, DHS considers an F–1 nonimmigrant student who engages in a reduced course load or employment (or both) after this notice is effective to be engaging in a ''full course of study,'' *see* 8 CFR 214.2(f)(6), and eligible for employment authorization, through the end of any academic term for which such student is matriculated as of December 12, 2025, provided the student satisfies the minimum course load requirements in this notice.

transfers to another SEVP-certified academic institution remains eligible for the relief provided by means of this notice.

Why is DHS taking this action?

DHS is taking action to provide relief to Ethiopian F–1 nonimmigrant students experiencing severe economic hardship due to the current armed conflict and the current humanitarian crisis in Ethiopia. Based on its review of country conditions in Ethiopia and input received from the U.S. Department of State (DOS), DHS is taking action to allow eligible F–1 nonimmigrant students from Ethiopia to request employment authorization, work an increased number of hours while school is in session, and reduce their course load while continuing to maintain F–1 nonimmigrant student status.

In November 2020, fighting between the Ethiopian National Defense Forces (ENDF) [2] and the Tigray People's Liberation Front (TPLF) [3] resulted in a protracted conflict in the northern Tigray region, and reports of serious and widespread abuses.[4] Violence spread to neighboring Afar and Amhara regions, resulting in ''mass displacement and a worsening of the humanitarian situation'' in all three regions.[5] In November 2022, the Ethiopian federal government and the TPLF signed the cessation of hostilities agreement (COHA) with the goal of ensuring ''peace and improved access in Northern Ethiopia regions of Afar, Amhara, and Tigray.'' [6] However, in 2023, fighting broke out between the ENDF and the Fano militia, a non-state militia in Amhara, and violence elsewhere in Ethiopia has escalated. In addition to the conflict in Ethiopia, the human rights situation in Ethiopia has deteriorated in recent months. The humanitarian situation has also degenerated, partially due to the uptick in armed clashes, as well as other factors including significant food insecurity, disease, and internal displacement.

Security Concerns

Despite the COHA and improvements in the northern Tigray region, violence has continued, or escalated, in other parts of the country.[7] In the Amhara region, rising insecurity and violence led the Ethiopian government to declare a state of emergency in August 2023.[8] In Oromia in May 2023, clashes between the Ethiopian federal government and Oromo Liberation Army-Shane (OLA-Shane) [9] led ''to violence levels comparable to those throughout 2022.'' [10] Moreover, in December 2023, ACLED reported that political violence persisted along the regional border between the Oromia and Amhara regions.[11]

Humanitarian Concerns

Though the COHA was signed in November 2022, Northern Ethiopia has faced increasing demands for humanitarian and protection services.[12] Rising insecurity also led to increased displacement and protection risks in the Amhara region, and along its regional border with Tigray.[13] In October 2023, the International Commission of Human Rights Experts on Ethiopia (ICHREE) stated that state and non-state armed groups in Ethiopia had committed human rights violations.[14]

In November 2023, the United Nations High Commissioner for Refugees (UNHCR) assessed that ''children are increasingly resorting to harmful activities to cope with the situation, including school drop-out, child marriage, sexual exploitation, begging, child labor and theft.'' [15] UNHCR further noted that ''children living in the conflict zones lack adequate access to school, food, health care and other essential services that meet their specific needs.'' [16] In addition, in Benishangul-Gumuz, Oromia, Gambella, and Somali regions, individuals reportedly face increasing protection needs due to inter-communal conflict, conflict between government forces and unidentified armed groups, drought, flooding, and cholera.[17]

In 2023, food insecurity continued to be a major concern in Ethiopia due to multiple challenges, including high malnutrition rates, and recent reports of drought-like conditions.[18] As of September 2023, ''over 20 million people [are] in urgent need of food assistance and agriculture support.'' [19] This figure represents ''an increase of about 150 percent over the last 5

[2] The Ethiopian National Defense Force is Ethiopia's military comprised of an army and air force. ENDF currently has four regional commands: Northern, Eastern, Western and Southern Commands. Security situation in Tigray region between 1 March 2020–28 February 2021, EASO, March 30, 2021, available at *https://www.ecoi.net/en/file/local/2048047/2021_03_Q-02_EASO_COI_QUERY_Ethiopia_Tigray.pdf* (last visited on Dec. 13, 2023).

[3] The TPLF was the ruling party of the Tigray regional government, and between 1991 through 2018 was the dominant ruling party in Ethiopia's former coalition government—the Ethiopian People's Democratic Front (EPRDF). Security situation in Tigray region between 1 March 2020–28 February 2021, EASO, March 30, 2021, available at *https://www.ecoi.net/en/file/local/2048047/2021_03_Q-02_EASO_COI_QUERY_Ethiopia_Tigray.pdf* (last visited on Dec. 13, 2023).

[4] 2020 Country Reports on Human Rights Practices: Ethiopia, U.S Department of State, March 30, 2021, available at *https://www.state.gov/wp-content/uploads/2021/03/ETHIOPIA-2020-HUMAN-RIGHTS-REPORT.pdf* (last visited on Dec. 13, 2023).

[5] Ethiopia Response to the Tigray Crisis—Situation Report, UN Population Fund, August 15–31, 2021, available at *https://reliefweb.int/sites/reliefweb.int/files/resources/unfpa_extsitrep_15-31_august_tigrayresponse.pdf* (last visited on Dec. 13, 2023).

[6] Ethiopia: Protection Cluster National Strategy 2023–2025, Protection Cluster, UNHCR, Nov. 3, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited don Dec. 6, 2023).

[7] Humanitarian Response Plan Ethiopia, UNOCHA, February 2023, available at *https://humanitarianaction.info/plan/1128/article/ethiopia-hrp-2023#page-title* (last visited Feb. 27, 2024).

[8] UN International Commission of Human Rights Experts on Ethiopia, UN Human Rights Council, October 3, 2023, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf* (last visited on Nov. 21, 2023).

[9] In April 2019, OLA-Shane spilt from the main opposition group from Oromia, the Oromo Liberation Front ''due to disagreement over disarming its fighters'' as part of the peace agreements between the EPP and OLF. EPO Actor Profiles—OLA-Shane, ACLED, available at *https://epo.acleddata.com/actor-profiles/#1622661802591-0e52a034-00f0* (last visited on Dec. 13, 2023).

[10] Violence Returns to Oromia Despite Attempted Peace Talks, ACLED-Ethiopia Peace Observatory, May 2023, available at *https://epo.acleddata.com/2023/06/22/epo-may-2023-monthly-violence-returns-to-oromia-despite-attempted-peace-talks/* (last visited on Nov. 21, 2023).

[11] EPO Weekly Report, ACLED, December 6, 2023, available at *https://epo.acleddata.com/2023/12/06/epo-weekly-25-november-1-december-2023/* (last visited on Dec. 6, 2023).

[12] Ethiopia Protection Cluster Update, UNHCR, Protection Cluster, November 9, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-update-third-quarter-2023,* (last visited on Dec. 6, 2023).

[13] *Id.*

[14] International Commission of Human Rights Experts on Ethiopia, UN Human Rights Council, October 3, 2023, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf* (last visited on Nov. 20, 2023).

[15] Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, UNHCR, November 3, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited on Dec. 6, 2023).

[16] Concluding observations on the second periodic report of Ethiopia, UN International Covenant on Civil and Political Rights, December 7, 2022, available at *https://www.ecoi.net/en/file/local/2083101/G2258918.pdf* (last visited on Dec. 13, 2023).

[17] Ethiopia Protection Cluster Update, UNHCR, Protection Cluster, November 9, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-update-third-quarter-2023* (last visited on Dec. 6, 2023).

[18] Ethiopia Humanitarian Response Situation, UN Population Fund, November 30, 2023, available at *https://reliefweb.int/report/ethiopia/unfpa-ethiopia-humanitarian-response-situation-report-october-2023,* (last visited on Dec. 6, 2023).

[19] Northern Ethiopia—Public Health Situation Analysis, World Health Organization, September 22, 2023, available at *https://reliefweb.int/report/ethiopia/northern-ethiopia-public-health-situation-analysis-phsa-25-august-2023* (last visited on Dec. 6, 2023).

years.'' [20] Additionally, high levels of acute malnutrition of children under five years of age continued in several regions of the country.[21]

Human Rights Concerns

The UNHCR reported in January 2024, that, ''Access for humanitarian actors remains restricted in locations affected by violence (especially in Amhara, Oromia, parts of Benishangul Gumuz), while the safety and security of the civilian population, including IDPs, is deteriorating.[22] UNHCR further assessed that, ''in conflict-affected-areas of Northern Ethiopia and Oromia, and in zones impacted by recurrent ethnic violence (*e.g.,* along the border between Somali and Afar regions), civilians face indiscriminate attacks by both state forces and non-state armed groups.'' [23] There are also increasing reports of violations by security forces, including those involving excessive use of force and extrajudicial killings.[24] The ICHREE further noted that ''the Ethiopian Government continues to tolerate and has failed to hold to account Amhara forces, including *fano* militia, who have perpetrated serious violations against Tigrayan women, men and children, in particular in Western Tigray.'' [25]

In March 2023, U.S. Secretary of State Antony Blinken stated the following regarding atrocities committed in Tigray, ''members of [ENDF], Eritrean Defense Forces (EDF), [TPLF] forces, and Amhara forces committed war crimes during the conflict in northern Ethiopia. Members of ENDF, EDF, and Amhara forces also committed crimes against humanity, including murder, rape and other forms of sexual violence, and persecution.'' [26] Secretary Blinken also stated that members of the Amhara forces committed the crime against humanity of deportation or forcible transfer of people in western Tigray and also committed ethnic cleansing in western Tigray.[27]

Economic Concerns

In 2022, Ethiopia's real GDP growth fell to 5.3 percent from 5.6 percent in 2021.[28] However, Ethiopia's GDP remained above the average GDP in East Africa.[29] In 2022, inflation in Ethiopia rose significantly to 34 percent from 26.6 percent in the previous year. The rise in inflation and decline in growth is largely attributed to the impacted caused by internal conflict, Russia's invasion of Ukraine, and drought. The African Development Bank Group stated that, ''The fiscal deficit widened to 4.2 percent of GDP in 2022 from 2.8 percent in 2021 due to higher defense spending and weak revenue performance.'' Additionally, income per capita in Ethiopia grew by 2.7 percent in 2022, ''but internal conflict and drought increased humanitarian support requirements from 15.8 million people in 2021 to 20 million in 2022.'' [30] Other potential impacts on Ethiopia's economic conditions include increased internal conflict, growing numbers of displaced persons, drought, and outbreak of disease.

As of March 19, 2024, 3,620 F–1 nonimmigrant students from Ethiopia are enrolled at SEVP-certified academic institutions in the United States. Given the extent of the current armed conflict and the current humanitarian crisis in Ethiopia, affected students whose primary means of financial support comes from Ethiopia may need to be exempt from the normal student employment requirements to continue their studies in the United States. The current armed conflict and the current humanitarian crisis has made it unfeasible for many students to safely return to Ethiopia for the foreseeable future. Without employment authorization, these students may lack the means to meet basic living expenses.

What is the minimum course load requirement to maintain valid F–1 nonimmigrant status under this notice?

Undergraduate F–1 nonimmigrant students who receive on-campus or off-campus employment authorization under this notice must remain registered for a minimum of six semester or quarter hours of instruction per academic term. Undergraduate F–1 nonimmigrant students enrolled in a term of different duration must register for at least one half of the credit hours normally required under a ''full course of study.'' *See* 8 CFR 214.2(f)(6)(i)(B) and (F). A graduate-level F–1 nonimmigrant student who receives on-campus or off-campus employment authorization under this notice must remain registered for a minimum of three semester or quarter hours of instruction per academic term. *See* 8 CFR 214.2(f)(5)(v). Nothing in this notice affects the applicability of other minimum course load requirements set by the academic institution.

In addition, an F–1 nonimmigrant student (either undergraduate or graduate) granted on-campus or off-campus employment authorization under this notice may count up to the equivalent of one class or three credits per session, term, semester, trimester, or quarter of online or distance education toward satisfying this minimum course load requirement, unless their course of study is in an English language study program. *See* 8 CFR 214.2(f)(6)(i)(G). An F–1 nonimmigrant student attending an approved private school in kindergarten through grade 12 or public school in grades 9 through 12 must maintain ''class attendance for not less than the minimum number of hours a week prescribed by the school for normal progress toward graduation,'' as required under 8 CFR 214.2(f)(6)(i)(E). Nothing in this notice affects the applicability of federal and state labor laws limiting the employment of minors.

May an eligible F–1 nonimmigrant student who already has on-campus or off-campus employment authorization benefit from the suspension of regulatory requirements under this notice?

Yes. An F–1 nonimmigrant student who is an Ethiopian citizen, regardless of country of birth (or an individual having no nationality who last habitually resided in Ethiopia), who already has on-campus or off-campus employment authorization and is otherwise eligible may benefit under this notice, which suspends certain regulatory requirements relating to the minimum course load requirement under 8 CFR 214.2(f)(6)(i) and certain employment eligibility requirements under 8 CFR 214.2(f)(9). Such an eligible F–1 nonimmigrant student may benefit without having to apply for a new Form I–766, Employment

[20] *Id.*

[21] Ethiopia Acute Food Security, FEWS.NE T, October 2023, available at *https://fews.net/east-africa/ethiopia/food-security-outlook/october2023* (last visited on Dec. 8, 2023).

[22] Protection Cluster Advocacy Messages to address Critical Protection Risks and Violations (January 2024), available at *https://reliefweb.int/report/ethiopia/protection-cluster-advocacy-messages-address-critical-protection-risks-and-violations-january-2024* (last visited Feb. 02, 2024).

[23] Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, UNHCR, November 3, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited on Dec. 6, 2023).

[24] *Id.*

[25] International Commission on HR Experts on Ethiopia, UN Human Rights Council, October 3, 2023, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf* (last visited on Nov. 20, 2023).

[26] War Crimes, Crimes Against Humanity, and Ethnic Cleansing in Ethiopia, Press Statement from U.S. Secretary of State, March 20, 2023, available at *https://www.state.gov/war-crimes-crimes-against-humanity-and-ethnic-cleansing-in-ethiopia/* (last visited on Dec. 4, 2023).

[27] *Id.*

[28] Ethiopia Economic Outlook, African Development Bank Group, May 24, 2023, available at *https://www.afdb.org/en/countries/east-africa/ethiopia/ethiopia-economic-outlook* (last visited Jan. 5, 2024).

[29] *Id.*

[30] *Id.*

Authorization Document (EAD). To benefit from this notice, the F–1 nonimmigrant student must request that their designated school official (DSO) enter the following statement in the remarks field of the student's Student and Exchange Visitor Information System (SEVIS) record, which the student's Form I–20, Certificate of Eligibility for Nonimmigrant (F–1) Student Status, will reflect:

Approved for more than 20 hours per week of [DSO must insert ''on-campus'' or ''off-campus,'' depending upon the type of employment authorization the student already has] employment authorization and reduced course load under the Special Student Relief authorization from [DSO must insert the beginning date of the notice or the beginning date of the student's employment, whichever date is later] until [DSO must insert either the student's program end date, the current EAD expiration date (if the student is currently authorized for off-campus employment), or the end date of this notice, whichever date comes first].[31]

Must the F–1 nonimmigrant student apply for reinstatement after expiration of this special employment authorization if the student reduces his or her ''full course of study''?

No. DHS will deem an F–1 nonimmigrant student who receives and comports with the employment authorization permitted under this notice to be engaged in a ''full course of study'' [32] for the duration of the student's employment authorization, provided that a qualifying undergraduate level F–1 nonimmigrant student remains registered for a minimum of six semester or quarter hours of instruction per academic term, and a qualifying graduate level F–1 nonimmigrant student remains registered for a minimum of three semester or quarter hours of instruction per academic term. *See* 8 CFR 214.2(f)(5)(v) and (f)(6)(i)(F). Undergraduate F–1 nonimmigrant students enrolled in a term of different duration must register for at least one half of the credit hours normally required under a ''full course of study.'' *See* 8 CFR 214.2(f)(6)(i)(B) and (F). DHS will not require such students to apply for reinstatement under 8 CFR 214.2(f)(16) if they are otherwise maintaining F–1 nonimmigrant status.

Will an F–2 dependent (spouse or minor child) of an F–1 nonimmigrant student covered by this notice be eligible for employment authorization?

No. An F–2 spouse or minor child of an F–1 nonimmigrant student is not authorized to work in the United States and, therefore, may not accept employment under the F–2 nonimmigrant status, consistent with 8 CFR 214.2(f)(15)(i).

Will the suspension of the applicability of the standard student employment requirements apply to an individual who receives an initial F–1 visa and makes an initial entry into the United States after the effective date of this notice in the Federal Register?

No. The suspension of the applicability of the standard regulatory requirements only applies to certain F–1 nonimmigrant students who meet the following conditions:

(1) Are a citizen of Ethiopia regardless of country of birth (or an individual having no nationality who last habitually resided in Ethiopia);

(2) Were lawfully present in the United States on the date of publication of this notice in F–1 nonimmigrant status, under section 101(a)(15)(F)(i) of the INA, 8 U.S.C. 1101(a)(15)(F)(i);

(3) Are enrolled in an academic institution that is SEVP-certified for enrollment of F–1 nonimmigrant students;

(4) Are maintaining F–1 nonimmigrant status; and

(5) Are experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia.

An F–1 nonimmigrant student who does not meet all these requirements is ineligible for the suspension of the applicability of the standard regulatory requirements (even if experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia).

Does this notice apply to a continuing F–1 nonimmigrant student who departs the United States after the effective date of this notice in the Federal Register and who needs to obtain a new F–1 visa before returning to the United States to continue an educational program?

Yes. This notice applies to such an F–1 nonimmigrant student, but only if the DSO has properly notated the student's SEVIS record, which will then appear on the student's Form I–20. The normal rules for visa issuance remain applicable to a nonimmigrant who needs to apply for a new F–1 visa to continue an educational program in the United States.

Does this notice apply to elementary school, middle school, and high school students in F–1 status?

Yes. However, this notice does not by itself reduce the required course load for F–1 nonimmigrant students from Ethiopia enrolled in kindergarten through grade 12 at a private school, or grades 9 through 12 at a public high school. Such students must maintain the minimum number of hours of class attendance per week prescribed by the academic institution for normal progress toward graduation, as required under 8CFR214.2(f)(6)(i)(E). The suspension of certain regulatory requirements related to employment through this notice is applicable to all eligible F–1 nonimmigrant students regardless of educational level. Eligible F–1 nonimmigrant students from Ethiopia enrolled in an elementary school, middle school, or high school may benefit from the suspension of the requirement in 8 CFR 214.2(f)(9)(i) that limits on-campus employment to 20 hours per week while school is in session.

On-Campus Employment Authorization

Will an F–1 nonimmigrant student who receives on-campus employment authorization under this notice be authorized to work more than 20 hours per week while school is in session?

Yes. For an F–1 nonimmigrant student covered in this notice, the Secretary is suspending the applicability of the requirement in 8 CFR 214.2(f)(9)(i) that limits an F–1 nonimmigrant student's on-campus employment to 20 hours per week while school is in session. An eligible F–1 nonimmigrant student has authorization to work more than 20 hours per week while school is in session if the DSO has entered the following statement in the remarks field of the student's SEVIS record, which will be reflected on the student's Form I–20:

Approved for more than 20 hours per week of on-campus employment and reduced course load, under the Special Student Relief authorization from [DSO must insert the beginning date of this notice or the beginning date of the student's employment, whichever date is later] until [DSO must insert the student's program end date or the end date of this notice, whichever date comes first].[33]

To obtain on-campus employment authorization, the F–1 nonimmigrant student must demonstrate to the DSO that the employment is necessary to avoid severe economic hardship directly resulting from the current armed conflict and the current humanitarian

[31] *See* note 1, *supra.*

[32] *See* 8 CFR 214.2(f)(6).

[33] *See* note 1, *supra.*

crisis in Ethiopia. An F–1 nonimmigrant student authorized by the DSO to engage in on-campus employment by means of this notice does not need to file any applications with U.S. Citizenship and Immigration Services (USCIS). The standard rules permitting full-time on-campus employment when school is not in session or during school vacations apply, as described in 8 CFR 214.2(f)(9)(i).

Will an F–1 nonimmigrant student who receives on-campus employment authorization under this notice have authorization to reduce the normal course load and still maintain his or her F–1 nonimmigrant student status?

Yes. DHS will deem an F–1 nonimmigrant student who receives on-campus employment authorization under this notice to be engaged in a ''full course of study'' [34] for the purpose of maintaining their F–1 nonimmigrant student status for the duration of the on-campus employment, if the student satisfies the minimum course load requirement described in this notice, consistent with 8 CFR 214.2(f)(6)(i)(F). However, the authorization to reduce the normal course load is solely for DHS purposes of determining valid F–1 nonimmigrant student status. Nothing in this notice mandates that school officials allow an F–1 nonimmigrant student to take a reduced course load if the reduction would not meet the academic institution's minimum course load requirement for continued enrollment.[35]

Off-Campus Employment Authorization

What regulatory requirements does this notice temporarily suspend relating to off-campus employment?

For an F–1 nonimmigrant student covered by this notice, as provided under 8 CFR 214.2(f)(9)(ii)(A), the Secretary is suspending the following regulatory requirements relating to off-campus employment:

(a) The requirement that a student must have been in F–1 nonimmigrant student status for one full academic year to be eligible for off-campus employment;

(b) The requirement that an F–1 nonimmigrant student must demonstrate that acceptance of employment will not interfere with the student's carrying a full course of study;

(c) The requirement that limits an F–1 nonimmigrant student's employment authorization to no more than 20 hours per week of off-campus employment while the school is in session; and

(d) The requirement that the student demonstrate that employment under 8 CFR 214.2(f)(9)(i) is unavailable or otherwise insufficient to meet the needs that have arisen as a result of the unforeseen circumstances.

Will an F–1 nonimmigrant student who receives off-campus employment authorization under this notice have authorization to reduce the normal course load and still maintain F–1 nonimmigrant status?

Yes. DHS will deem an F–1 nonimmigrant student who receives off-campus employment authorization by means of this notice to be engaged in a ''full course of study'' [36] for the purpose of maintaining F–1 nonimmigrant student status for the duration of the student's employment authorization if the student satisfies the minimum course load requirement described in this notice, consistent with 8 CFR 214.2(f)(6)(i)(F). The authorization for a reduced course load is solely for DHS purposes of determining valid F–1 nonimmigrant student status. Nothing in this notice mandates that school officials allow an F–1 nonimmigrant student to take a reduced course load if such reduced course load would not meet the school's minimum course load requirement.[37]

How may an eligible F–1 nonimmigrant student obtain employment authorization for off-campus employment with a reduced course load under this notice?

An F–1 nonimmigrant student must file a Form I–765, Application for Employment Authorization, with USCIS to apply for off-campus employment authorization based on severe economic hardship directly resulting from the current armed conflict and the current humanitarian crisis in Ethiopia.[38] Filing instructions are located at *https://www.uscis.gov/i-765.*

Fee considerations. Submission of a Form I–765 currently requires payment of a $520 fee. An applicant who is unable to pay the fee may submit a completed Form I–912, Request for Fee Waiver, along with the Form I–765, Application for Employment Authorization. *See https://www.uscis.gov/i-912.* The submission must include an explanation about why USCIS should grant the fee waiver and the reason(s) for the inability to pay, and any evidence to support the reason(s). *See* 8 CFR 106.2 and 106.3.

Supporting documentation. An F–1 nonimmigrant student seeking off-campus employment authorization due to severe economic hardship must demonstrate the following to their DSO:

(1) This employment is necessary to avoid severe economic hardship; and

(2) The hardship is a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia.

If the DSO agrees that the F–1 nonimmigrant student is entitled to receive such employment authorization, the DSO must recommend application approval to USCIS by entering the following statement in the remarks field of the student's SEVIS record, which will then appear on that student's Form I–20:

> Recommended for off-campus employment authorization in excess of 20 hours per week and reduced course load under the Special Student Relief authorization from the date of the USCIS authorization noted on Form I–766 until [DSO must insert the program end date or the end date of this notice, whichever date comes first].[39]

The F–1 nonimmigrant student must then file the properly endorsed Form I–20 and Form I–765 according to the instructions for the Form I–765. The F–1 nonimmigrant student may begin working off campus only upon receipt of the EAD from USCIS.

DSO recommendation. In making a recommendation that an F–1 nonimmigrant student be approved for Special Student Relief, the DSO certifies that:

(a) The F–1 nonimmigrant student is in good academic standing and is carrying a ''full course of study'' [40] at the time of the request for employment authorization;

(b) The F–1 nonimmigrant student is a citizen of Ethiopia, regardless of country of birth (or an individual having no nationality who last habitually resided in Ethiopia), and is experiencing severe economic hardship as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia, as documented on the Form I–20;

(c) The F–1 nonimmigrant student has confirmed that the student will comply with the reduced course load requirements of this notice and register for the duration of the authorized employment for a minimum of six semester or quarter hours of instruction per academic term if at the

[34] *See* 8 CFR 214.2(f)(6).

[35] Minimum course load requirement for enrollment in a school must be established in a publicly available document (*e.g.,* catalog, website, or operating procedure), and it must be a standard applicable to all students (U.S. citizens and foreign students) enrolled at the school.

[36] *See* 8 CFR 214.2(f)(6).

[37] *See* note 35, *supra.*

[38] *See* 8 CFR 274a.12(c)(3)(iii).

[39] *See* note 1, *supra.*

[40] *See* 8 CFR 214.2(f)(6).

undergraduate level, or for a minimum of three semester or quarter hours of instruction per academic term if the student is at the graduate level;[41] and

(d) The off-campus employment is necessary to alleviate severe economic hardship to the individual as a direct result of the current armed conflict and the current humanitarian crisis in Ethiopia.

Processing. To facilitate prompt adjudication of the student's application for off-campus employment authorization under 8 CFR 214.2(f)(9)(ii)(C), the F–1 nonimmigrant student should do both of the following:

(a) Ensure that the application package includes the following documents:

(1) A completed Form I–765 with all applicable supporting evidence;

(2) The required fee or properly documented fee waiver request as defined in 8 CFR 106.2 and 106.3; and

(3) A signed and dated copy of the student's Form I–20 with the appropriate DSO recommendation, as previously described in this notice; and

(b) Send the application in an envelope which is clearly marked on the front of the envelope, bottom right-hand side, with the phrase ''SPECIAL STUDENT RELIEF.''[42] Failure to include this notation may result in significant processing delays.

If USCIS approves the student's Form I–765, USCIS will send the student a Form I–766 EAD as evidence of employment authorization. The EAD will contain an expiration date that does not exceed the end of the granted temporary relief.

Temporary Protected Status (TPS) Considerations

Can an F–1 nonimmigrant student apply for TPS and for benefits under this notice at the same time?

Yes. An F–1 nonimmigrant student who has not yet applied for TPS or for other relief that reduces the student's course load per term and permits an increased number of work hours per week, such as Special Student Relief,[43] under this notice has two options.

Under the first option, the F–1 nonimmigrant student may apply for TPS according to the instructions in the USCIS notice designating Ethiopia for TPS elsewhere in this issue of the **Federal Register**. All TPS applicants must file a Form I–821, Application for Temporary Protected Status, with the appropriate fee (or request a fee waiver). Although not required to do so, if F–1 nonimmigrant students want to obtain a new TPS-related EAD that is valid through December 12, 2025, and to be eligible for automatic EAD extensions that may be available to certain EADs with an A–12 or C–19 category code, they must file Form I–765 and pay the Form I–765 fee (or request a fee waiver). After receiving the TPS-related EAD, an F–1 nonimmigrant student may request that their DSO make the required entry in SEVIS and issue an updated Form I–20, which notates that the nonimmigrant student has been authorized to carry a reduced course load, as described in this notice. As long as the F–1 nonimmigrant student maintains the minimum course load described in this notice, does not otherwise violate their nonimmigrant status, including as provided under 8 CFR 214.1(g), and maintains TPS, then the student maintains F–1 status and TPS concurrently.

Under the second option, the F–1 nonimmigrant student may apply for an EAD under Special Student Relief by filing Form I–765 with the location specified in the filing instructions. At the same time, the F–1 nonimmigrant student may file a separate TPS application but must submit the Form I–821 according to the instructions provided in the **Federal Register** notice designating Ethiopia for TPS. If the F–1 nonimmigrant student has already applied for employment authorization under Special Student Relief, they are not required to submit the Form I–765 as part of the TPS application. However, some nonimmigrant students may wish to obtain a TPS-related EAD in light of certain extensions that may be available to EADs with an A–12 or C–19 category code that are not available to the C–3 category under which Special Student Relief falls. The F–1 nonimmigrant student should check the appropriate box when filling out Form I–821 to indicate whether a TPS-related EAD is being requested. Again, as long as the F–1 nonimmigrant student maintains the minimum course load described in this notice and does not otherwise violate the student's nonimmigrant status, included as provided under 8 CFR 214.1(g), the nonimmigrant will be able to maintain compliance requirements for F–1 nonimmigrant student status while having TPS.

When a student applies simultaneously for TPS and benefits under this notice, what is the minimum course load requirement while an application for employment authorization is pending?

The F–1 nonimmigrant student must maintain normal course load requirements for a ''full course of study''[44] unless or until the nonimmigrant student receives employment authorization under this notice. TPS-related employment authorization, by itself, does not authorize a nonimmigrant student to drop below twelve credit hours, or otherwise applicable minimum requirements (*e.g.,* clock hours for non-traditional academic programs). Once approved for a TPS-related EAD and Special Student Relief employment authorization, as indicated by the DSO's required entry in SEVIS and issuance of an updated Form I–20, the F–1 nonimmigrant student may drop below twelve credit hours, or otherwise applicable minimum requirements (with a minimum of six semester or quarter hours of instruction per academic term if at the undergraduate level, or for a minimum of three semester or quarter hours of instruction per academic term if at the graduate level). *See* 8 CFR 214.2(f)(5)(v), (f)(6), and (f)(9)(i) and (ii).

How does a student who has received a TPS-related EAD then apply for authorization to take a reduced course load under this notice?

There is no further application process with USCIS if a student has been approved for a TPS-related EAD. The F–1 nonimmigrant student must demonstrate and provide documentation to the DSO of the direct economic hardship resulting from the current armed conflict and the current humanitarian crisis in Ethiopia. The DSO will then verify and update the student's record in SEVIS to enable the F–1 nonimmigrant student with TPS to reduce the course load without any further action or application. No other EAD needs to be issued for the F–1 nonimmigrant student to have employment authorization.

Can a noncitizen who has been granted TPS apply for reinstatement of F–1 nonimmigrant student status after the noncitizen's F–1 nonimmigrant student status has lapsed?

Yes. Regulations permit certain students who fall out of F–1 nonimmigrant student status to apply for reinstatement. *See* 8 CFR 214.2(f)(16). This provision may apply to students who worked on a TPS-

[41] 8 CFR 214.2(f)(5)(v).

[42] Guidance for direct filing addresses can be found here: *https://www.uscis.gov/i-765-addresses.*

[43] *See* DHS Study in the States, Special Student Relief, *https://studyinthestates.dhs.gov/students/special-student-relief* (last visited Dec. 17, 2023).

[44] *See* 8 CFR 214.2(f)(6).

related EAD or dropped their course load before publication of this notice, and therefore fell out of student status. These students must satisfy the criteria set forth in the F–1 nonimmigrant student status reinstatement regulations.

How long will this notice remain in effect?

This notice grants temporary relief until December 12, 2025,[45] to eligible F–1 nonimmigrant students. DHS will continue to monitor the situation in Ethiopia. Should the special provisions authorized by this notice need modification or extension, DHS will announce such changes in the **Federal Register**.

Paperwork Reduction Act (PRA)

An F–1 nonimmigrant student seeking off-campus employment authorization due to severe economic hardship resulting from the current armed conflict and the current humanitarian crisis in Ethiopia must demonstrate to the DSO that this employment is necessary to avoid severe economic hardship. A DSO who agrees that a nonimmigrant student should receive such employment authorization must recommend an application approval to USCIS by entering information in the remarks field of the student's SEVIS record. The authority to collect this information is in the SEVIS collection of information currently approved by the Office of Management and Budget (OMB) under OMB Control Number 1653–0038.

This notice also allows an eligible F–1 nonimmigrant student to request employment authorization, work an increased number of hours while the academic institution is in session, and reduce their course load while continuing to maintain F–1 nonimmigrant student status.

To apply for employment authorization, certain F–1 nonimmigrant students must complete and submit a currently approved Form I–765 according to the instructions on the form. OMB has previously approved the collection of information contained on the current Form I–765, consistent with the PRA (OMB Control Number 1615–0040). Although there will be a slight increase in the number of Form I–765 filings because of this notice, the number of filings currently contained in the OMB annual inventory for Form I–765 is sufficient to cover the additional filings. Accordingly, there is no further action required under the PRA.

Alejandro Mayorkas,

Secretary, U.S. Department of Homeland Security.

[FR Doc. 2024–07642 Filed 4–12–24; 8:45 am]

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[45] *See* note 1, *supra.*

DEPARTMENT OF HOMELAND SECURITY

U.S. Citizenship and Immigration Services

[CIS No. 2771–24; DHS Docket No. USCIS–2024–0001; RIN 1615–ZC08]

Implementation of Employment Authorization for Individuals Covered by Deferred Enforced Departure for Certain Palestinians

AGENCY: U.S. Citizenship and Immigration Services (USCIS), Department of Homeland Security (DHS).

ACTION: Notice of employment authorization for individuals covered by Deferred Enforced Departure (DED).

SUMMARY: On February 14, 2024, President Joseph Biden issued a memorandum to the Secretary of State and the Secretary of Homeland Security (Secretary) determining that it was in the foreign policy interest of the United States to defer for 18 months, the removal of certain Palestinians present in the United States and to provide them with employment authorization documentation. The memorandum directed the Secretary to make provision for immediate allowance of employment authorization for such individuals. This notice provides information about Deferred Enforced Departure (DED) for Palestinians and provides information on how eligible individuals may apply for DED-based Employment Authorization Documents (EADs) with USCIS, as well as for travel authorization.

DATES: DED for eligible Palestinian noncitizens covered by this notice began on February 14, 2024, and ends on August 13, 2025.

FOR FURTHER INFORMATION CONTACT:

- You may contact Rená Cutlip-Mason, Chief, Humanitarian Affairs Division, Office of Policy and Strategy, U.S. Citizenship and Immigration Services, Department of Homeland Security, by mail at 5900 Capital Gateway Drive, Camp Springs, MD 20746, or by phone at 240–721–3000.
- For further information on DED, including additional information on eligibility, please visit the USCIS DED web page at *https://www.uscis.gov/humanitarian/deferred-enforced-departure.* You can find specific information about DED for certain Palestinians by selecting ''Individuals Covered by DED—Palestinian Territories'' from the menu on the left of the DED web page.
- If you have additional questions about DED, please visit *https://www.uscis.gov/tools.* Our online virtual assistant, Emma, can answer many of your questions and point you to additional information on our website. If you are unable to find your answers there, you may also call our USCIS Contact Center at 800–375–5283 (TTY 800–767–1833).
- Applicants seeking information about the status of their individual I–765, EAD Application for Employment Authorization, or I–131, Application for Travel Document, cases may check Case Status Online, available on the USCIS website at *https://www.uscis.gov,* or visit the USCIS Contact Center at *https://www.uscis.gov/contactcenter.*
- Further information will also be available at local USCIS offices upon publication of this Notice.

SUPPLEMENTARY INFORMATION:

Definitions

For the purposes of this notice, USCIS intends to cover non-U.S. citizens of any nationality, or without nationality, who are Palestinian. USCIS will evaluate claims for DED employment authorization and advance travel authorization based on authentic documents,[1] regardless of validity period [2] or expiration, indicating the applicant is Palestinian, including, but not limited to:

- a Palestinian Authority Passport;
- a Palestinian Authority Identification Card;
- a Birth Certificate or Birth Extract verified or issued by a recognized governmental authority identifying the holder as having been born in the Palestinian Territories;
- an identification document issued by a third country, the United Nations, its specialized agencies and related organizations, or the International Committee of the Red Cross, indicating the holder is a Palestinian; or

[1] On June 14, 2007, Hamas, designated as a foreign terrorist organization by the Secretary of State in accordance with section 219 of the INA, 8 U.S.C. 1189, took de facto administrative control of Gaza, including issuance of civil documents for the territory. USCIS will not accept identity documents issued by Hamas after June 14, 2007, unless verified by the Palestinian Authority in the West Bank.

[2] The term validity period is used in reference to the length of time a document can be used for purposes of travel or identification prior to the expiration date.

• a travel document issued by a third country, the United Nations, its specialized agencies and related organizations, or the International Committee of the Red Cross, identifying the holder as a Palestinian.

Table of Abbreviations

CFR—Code of Federal Regulations
DED—Deferred Enforced Departure
DHS—U.S. Department of Homeland Security
EAD—Employment Authorization Document
FNC—Final Non-confirmation
Form I–131—Application for Travel Document
Form I–765—Application for Employment Authorization
Form I–797—Notice of Action
Form I–9—Employment Eligibility Verification
Form I–912—Request for Fee Waiver
Form I–94—Arrival/Departure Record
FR—Federal Register
Government—U.S. Government
IER—U.S. Department of Justice, Civil Rights Division, Immigrant and Employee Rights Section
INA—Immigration and Nationality Act
SAVE—USCIS Systematic Alien Verification for Entitlements Program
Secretary—Secretary of Homeland Security
TTY—Text Telephone
USCIS—U.S. Citizenship and Immigration Services
U.S.C.—United States Code

Purpose of This Action

Pursuant to the President's constitutional authority to conduct the foreign relations of the United States, President Biden has determined that it is in the foreign policy interest of the United States to defer through August 13, 2025, the removal of certain Palestinians who have resided in the United States since February 14, 2024.[3] Through this Notice, as directed by the President, DHS is establishing procedures for Palestinian individuals covered by DED to apply for EADs valid through August 13, 2025. Employment authorization and the procedures for obtaining EADs in this Notice apply to any of the following individuals who are not subject to any of the ineligibilities described in President Biden's February 14, 2024 memorandum to the Secretaries of State and Homeland Security: Palestinians, regardless of place of birth or country or area of last habitual residence, who have resided in the United States since February 14, 2024. Palestinians must meet all eligibility criteria, including required documentation, for DED described in this Notice. Finally, this Notice provides instructions for eligible Palestinians in the United States on how to request advance travel authorization.

What is Deferred Enforced Departure (DED)?

• DED is an administrative deferral of removal ordered by the President. The authority to extend DED arises from the President's constitutional authority to conduct the foreign relations of the United States. DED has been authorized in situations where certain groups of noncitizens may face danger if required to return to countries or any part of such foreign countries experiencing political instability, conflict, or other unsafe conditions, or when there are other foreign policy reasons for allowing a designated group of noncitizens to remain in the United States temporarily.

• Although DED is not a specific immigration status and does not require an application to be filed with USCIS, individuals covered by DED are not subject to removal from the United States, usually for a designated period. Furthermore, the President may direct that the Secretary of Homeland Security provide that certain benefits that are authorized under the immigration laws, such as employment authorization, be made available to the noncitizens covered by the DED directive during the designated period.

• USCIS publishes a **Federal Register** notice to inform the covered population on how to apply for any benefits provided. See instructions for Form I–765, Application for Employment Authorization.

• The eligibility requirements for individuals who are covered by DED are based on the terms of the President's directive regarding DED and any relevant implementing requirements established by DHS. Since DED is a directive to defer removal of an individual, rather than a specific immigration status like Temporary Protected Status, there is no DED application form required for an individual to be covered by DED. If an individual covered by DED wants to apply for an EAD, they must file Form I–765, Application for Employment Authorization. Similarly, should an individual covered by DED want to apply for advance travel authorization, they must file Form I–131, Application for Travel Document.

Ur M. Jaddou,

Director, U.S. Citizenship and Immigration Services.

Eligibility and Employment Authorization for DED

How will I know if I am eligible for employment authorization under the DED Presidential Memorandum for Certain Palestinians?

Consistent with the President's February 14, 2024, DED memorandum,[4] the procedures for employment authorization in this Notice apply to non-U.S. citizens who are Palestinians who were present in the United States on February 14, 2024, except for those:

• Who have voluntarily returned to the Palestinian Territories after February 14, 2024;

• Who have not continuously resided in the United States since February 14, 2024;

• Who are inadmissible under 212(a)(3) of the Immigration and Nationality Act (INA) (8 U.S.C. 1182(a)(3)) or deportable under section 237(a)(4) of the INA (8 U.S.C. 1227(a)(4));

• Who have been convicted of any felony or two or more misdemeanors committed in the United States, or who meet any of the criteria set forth in section 208(b)(2)(A) of the INA (8 U.S.C. 1158(b)(2)(A));

• Who are subject to extradition;

• Whose presence in the United States the Secretary of Homeland Security has determined is not in the interest of the United States or presents a danger to public safety; or

• Whose presence in the United States the Secretary of State has reasonable grounds to believe would have potentially serious adverse foreign policy consequences for the United States.

What will I need to file if I am covered by DED and would like to obtain an EAD?

If you are a Palestinian covered by DED and want a DED-based EAD, you must file Form I–765. Please carefully follow the Form I–765 instructions when completing the application for an EAD. When filing the Form I–765, you must:

• Indicate that you are eligible for DED by entering ''(a)(11)'' in response to Question 27 on the Form I–765; and

• Submit the fee for the Form I–765 (or request a fee waiver, which you may submit on Form I–912, Request for Fee

[3] *See* Deferred Enforced Departure for Certain Palestinians, 89 FR 12743 (Feb. 14, 2024); Memorandum for the Secretary of State and the Secretary of Homeland Security, Deferred Enforced Departure for Certain Palestinians, February 14, 2024, *https://www.whitehouse.gov/briefing-room/presidential-actions/2024/02/14/memorandum-on-the-deferred-enforced-departure-for-certain-palestinians/*.

[4] *See* 89 FR at 12743.

Waiver).[5] See Fee Schedule (Form G–1055).

Supporting Documentation

The filing instructions on Form I–765 list all the documents needed to apply. You may also find information on the initial required documents on the USCIS website at *https://www.uscis.gov/i-765.* If USCIS determines after reviewing your submission that it needs additional information, it will send you a Request for Evidence (RFE).

How will I know if I must submit my biometrics to USCIS?

If biometrics are required to produce your EAD, you will receive a biometrics services appointment notice with the time and location of your appointment. You can prepare for your biometrics appointment by visiting the *Preparing for Your Biometric Appointment* web page at *https://www.uscis.gov/forms/filing-guidance/preparing-for-your-biometric-services-appointment* and ensure that you bring valid photo identification to your appointment.

Where do I find the fees for DED applicants?

You can find filing fees by visiting Form G–1055, Fee Schedule *at https://www.uscis.gov/g-1055* for the most current fees for DED applicants for the Form I–765 and Form I–131. No biometrics fees are required at the time of filing.

Where do I submit my completed DED-based Form I–765, Application for Employment Authorization?

For a DED-based EAD, mail your completed Form I–765 and supporting documentation to the proper address in Table 1.

TABLE 1—MAILING ADDRESSES

If you are . . .	Mail to . . .
Using the U.S. Postal Service (USPS).	USCIS, Attn: DED for Palestinians, P.O. Box 805283, Chicago, IL 60680–5283.
Using FedEx, UPS, or DHL.	USCIS, Attn: DED for Palestinians, (Box 805283), 131 South Dearborn Street, 3rd Floor, Chicago, IL 60603–5517.

You may file Form I–765 and Form I–131, Application for Travel Document, together or separately. If you are filing multiple applications, petitions, or requests, USCIS recommends sending separate payments for each application, otherwise if one payment is submitted and one of the applications, petitions, or requests is rejected, all others will be rejected as well. More information on filing a Form I–131 appears below.

Can I file my DED-based Form I–765 electronically?

No. Electronic filing is not available when filing a DED-based Form I–765.

What happens after August 13, 2025, to DED-based EADs?

This DED authorization is set to end on August 13, 2025. After that date, employers can no longer accept EADs with the notation A–11 under Category and a Card Expires date of August 13, 2025. Employees will need to present other evidence of continued work authorization.

Travel

Palestinians covered by DED may also apply for and be granted travel authorization as a matter of discretion. You must file for travel authorization if you wish to travel outside of the United States and be eligible to seek re-entry to the United States. If USCIS grants travel authorization, it generally gives you permission to leave the United States and return during a specific period. To request travel authorization, you must file Form I–131, available at *https://www.uscis.gov/i-131.* You may file Form I–131 together with your Form I–765 or separately. When filing the Form I–131, you must:

- Select Item Number 1.d. in Part 2 on the Form I–131; and
- Submit the fee for the Form I–131.

If you leave the United States without first receiving travel authorization, you may no longer be eligible for DED and may not be permitted to reenter the United States. Please also be advised that if you return to the Palestinian Territories, even with advance travel authorization, you may not be permitted to resume DED in the United States since the presidential memorandum providing for DED for Palestinians excludes individuals who have voluntarily returned to the Palestinian Territories after the date of the memorandum.[6]

Mailing Information

Mail your completed Form I–131 to the proper address provided in Table 1.

Supporting Documentation

The filing instructions for Form I–131 list all the documents you need to include with your application. You may also find information on the acceptable documentation and DED eligibility on the USCIS website at *https://www.uscis.gov/humanitarian/deferred-enforced-departure.* If USCIS needs additional evidence, it will issue you an RFE.

General Employment-Related Information for Individuals With DED-Based EADs and Their Employers

How can I obtain information on the status of my EAD request?

To get case status information about your DED-based EAD request, you can check Case Status Online at *https://www.uscis.gov,* or visit the USCIS Contact Center at *https://www.uscis.gov/contactcenter.* If your Form I–765 has been pending for more than 90 days, and you still need assistance, you may ask a question about your case online at *https://egov.uscis.gov/e-request/Intro.do* or call the USCIS Contact Center at 800–375–5283 (TTY 800–767–1833).

When I am hired, what documentation may I show to my employer as evidence of identity and employment authorization when completing Form I–9?

You can find the Lists of Acceptable Documents on Form I–9, Employment Eligibility Verification, as well as the Acceptable Documents web page at *https://www.uscis.gov/i-9-central/acceptable-documents.* Employers must complete Form I–9 to verify the identity and employment authorization of all new employees. Within three days of hire, employees must present acceptable documents to their employers as evidence of identity and employment authorization to satisfy Form I–9 requirements.

You may present any documentation from List A (which provides evidence of both identity and employment authorization) or documentation from List B (which provides evidence of your identity) together with documentation from List C (which provides evidence of employment authorization), or you may

[5] On January 31, 2024, DHS published a final rule that adjusts certain fees, including Form I–131 and the Form I–765, that went into effect on April 1, 2024. *See* U.S. Citizenship and Immigration Services Fee Schedule and Changes to Certain Other Immigration Benefit Request Requirements, 89 FR 6194 (Jan. 31, 2024) (effective Apr. 1, 2024). Additional information about the rule is available on the USCIS website. Frequently Asked Questions on the USCIS Fee Rule, USCIS, *https://www.uscis.gov/forms/filing-fees/frequently-asked-questions-on-the-uscis-fee-rule* (last visited Feb. 7, 2024).

[6] *See* 89 FR at 12743.

present an acceptable receipt as described in the Form I–9 Instructions. Employers may not reject a document based on a future expiration date. You can find additional information about Form I–9 on the I–9 Central web page at *https://www.uscis.gov/I-9Central.* An EAD is an acceptable document under List A.

If I have an EAD based on another immigration status, can I obtain a new DED-based EAD?

Yes, if you are covered by DED, you can obtain a new DED-based EAD, even if you already have an EAD or employment authorization based on another immigration status. If you want to obtain a DED-based EAD valid through August 13, 2025, you must file Form I–765 and pay the associated fee (unless USCIS grants your fee waiver request).[7]

Can my employer require that I provide any other documentation to complete Form I–9, such as evidence of my status or proof of my Palestinian identity?

No. When completing Form I–9, employers must accept any unexpired documentation that appears on the Form I–9 Lists of Acceptable Documents that reasonably appears to be genuine and that relates to you, or an acceptable List A, List B, or List C receipt. Employers may not request proof of Palestinian identity when completing Form I–9 for new hires or reverifying the employment authorization of current employees. Refer to the ''Note to Employees'' section of this **Federal Register** notice for important information about your rights if your employer rejects lawful documentation, requires additional documentation, or otherwise discriminates against you based on your citizenship or immigration status, or your national origin.

Note to All Employers

Employers are reminded that the laws requiring proper employment eligibility verification and prohibiting unfair immigration-related employment practices remain in full force. This **Federal Register** notice does not supersede or in any way limit applicable employment verification rules and policy guidance, including those rules setting forth reverification requirements. For general questions about the employment eligibility verification process, employers may call USCIS at 888–464–4218 (TTY 877–875–6028) or email USCIS at *I-9Central@dhs.gov.* USCIS accepts calls and emails in English and many other languages. For questions about avoiding discrimination during the employment eligibility verification process (Form I–9 and E-Verify), employers may call the U.S. Department of Justice, Civil Rights Division, Immigrant and Employee Rights Section (IER) Employer Hotline at 800–255–8155 (TTY 800–237–2515). IER offers language interpretation in numerous languages. Employers may also email IER at *IER@usdoj.gov* or get more information online at *https://www.justice.gov/ier.*

Note to Employees

For general questions about the employment eligibility verification process, employees may call USCIS at 888–897–7781 (TTY 877–875–6028) or email USCIS at *I-9Central@dhs.gov.* USCIS accepts calls in English, Spanish and many other languages. Employees or applicants may also call the IER Worker Hotline at 800–255–7688 (TTY 800–237–2515) for information regarding employment discrimination based upon citizenship, immigration status, or national origin, including discrimination related to Form I–9 and E-Verify. The IER Worker Hotline provides language interpretation in numerous languages.

To comply with the law, employers must accept any document or combination of documents from the Lists of Acceptable Documents if the documentation reasonably appears to be genuine and to relate to the employee, or an acceptable List A, List B, or List C receipt as described in the Form I–9 instructions. Employers may not require extra or additional documentation beyond what is required for Form I–9 completion. Further, employers participating in E-Verify who receive an E-Verify case result of ''Tentative Non-confirmation'' (mismatch) must promptly inform employees of the mismatch and give such employees an opportunity to take action to resolve the mismatch. A mismatch means that the information entered into E-Verify from Form I–9 differs from records available to DHS.

Employers may not terminate, suspend, delay training, withhold or lower pay, or take any adverse action against an employee because of a mismatch while the case is still pending with E-Verify. A Final Non-confirmation (FNC) case result occurs if E-Verify cannot confirm an employee's employment eligibility. An employer may terminate employment based on a case result of FNC. Work-authorized employees who receive a FNC may call USCIS for assistance at 888–897–7781 (TTY 877–875–6028). For more information about E-Verify-related discrimination or to report an employer for discrimination in the E-Verify process based on citizenship, immigration status, or national origin, contact IER's Worker Hotline at 800–255–7688 (TTY 800–237–2515). Additional information about proper nondiscriminatory Form I–9 and E-Verify procedures is available on the IER website at *https://www.justice.gov/ier* and the USCIS and E-Verify websites at *https://www.uscis.gov/i-9-central* and *https://www.e-verify.gov.*

Note Regarding Federal, State, and Local Government Agencies (Such as Departments of Motor Vehicles)

Whether you are applying for a Federal, state, or local government benefit, you may need to provide the government agency with documents that show you are covered under DED and/or authorized to work based on DED. Check with the government agency requesting documentation about which documents the agency will accept.

Some government agencies use SAVE to confirm the current immigration status of applicants for public benefits and licenses. SAVE can verify that an individual is covered by DED based on an EAD with category A–11 and/or Form I–797, Notice of Action, reflecting approval of your Form I–765 for an EAD with a DED category code of A–11. In most cases, SAVE provides an automated electronic response to benefit-granting agencies within seconds, but occasionally verification can be delayed.

You can check the status of your SAVE verification by using CaseCheck at *https://www.uscis.gov/save/save-casecheck.* CaseCheck is a free service that lets you follow the progress of your SAVE verification case using your date of birth and one immigration identifier number (such as your A-Number or USCIS number) or Verification Case Number. If an agency has denied your application based solely or in part on a SAVE response, the agency must allow you to appeal the decision in accordance with the agency's procedures. If the agency has received and acted on or will act on a SAVE verification and you do not believe the SAVE response is correct, the SAVE website, *https://www.uscis.gov/save,* has detailed information on how to correct or update your immigration record, make an appointment, or submit a written request to correct records.

[FR Doc. 2024–07866 Filed 4–12–24; 11:15 am]

BILLING CODE 9111–97–P

[7] For information about filing fee waiver requests including through Form I–912, Request for Fee Waiver, see *https://www.uscis.gov/forms/filing-fees/additional-information-on-filing-a-fee-waiver.*

DEPARTMENT OF HOMELAND SECURITY

U.S. Citizenship and Immigration Services

[OMB Control Number 1615–0125]

Agency Information Collection Activities; Extension, Without Change, of a Currently Approved Collection; Customer Profile Management System-IDENTity Verification Tool (CPMS–IVT)

AGENCY: U.S. Citizenship and Immigration Services, Department of Homeland Security.

ACTION: 30-Day notice.

SUMMARY: The Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (USCIS) invites the public and other Federal agencies to comment upon this proposed extension of a currently approved collection of information. In accordance with the Paperwork Reduction Act (PRA) of 1995, the information collection notice is published in the **Federal Register** to obtain comments regarding the nature of the information collection, the categories of respondents, the estimated burden (*i.e.,* the time, effort, and resources used by the respondents to respond), the estimated cost to the respondent, and the actual information collection instruments.

DATES: Comments are encouraged and will be accepted for 30 days until May 15, 2024.

ADDRESSES: Written comments and/or suggestions regarding the item(s) contained in this notice, especially regarding the estimated public burden and associated response time, must be submitted via the Federal eRulemaking Portal website at *http://www.regulations.gov* under e-Docket ID number USCIS–2011–0008. All submissions received must include the OMB Control Number 1615–0125 in the body of the letter, the agency name and Docket ID number USCIS–2011–0008.

FOR FURTHER INFORMATION CONTACT: USCIS, Office of Policy and Strategy, Regulatory Coordination Division, Samantha Deshommes, Chief, telephone number (240) 721–3000 (This is not a toll-free number. Comments are not accepted via telephone message). Please note contact information provided here is solely for questions regarding this notice. It is not for individual case status inquiries. Applicants seeking information about the status of their individual cases can check Case Status Online, available at the USCIS website at *https://www.uscis.gov,* or call the USCIS Contact Center at 800–375–5283 (TTY 800–767–1833).

SUPPLEMENTARY INFORMATION:

Comments

The information collection notice was previously published in the **Federal Register** on October 26, 2023, at 88 FR 73613, allowing for a 60-day public comment period. USCIS received no comments in connection with the 60-day notice.

You may access the information collection instrument with instructions or additional information by visiting the Federal eRulemaking Portal site at: *https://www.regulations.gov* and entering USCIS–2011–0008 in the search box. Comments must be submitted in English, or an English translation must be provided. The comments submitted to USCIS via this method are visible to the Office of Management and Budget and comply with the requirements of 5 CFR 1320.12(c). All submissions will be posted, without change, to the Federal eRulemaking Portal at *https://www.regulations.gov,* and will include any personal information you provide. Therefore, submitting this information makes it public. You may wish to consider limiting the amount of personal information that you provide in any voluntary submission you make to DHS. DHS may withhold information provided in comments from public viewing that it determines may impact the privacy of an individual or is offensive. For additional information, please read the Privacy Act notice that is available via the link in the footer of *https://www.regulations.gov.*

Written comments and suggestions from the public and affected agencies should address one or more of the following four points:

(1) Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

(3) Enhance the quality, utility, and clarity of the information to be collected; and

(4) Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Overview of This Information Collection

(1) *Type of Information Collection:* Extension, Without Change, of a Currently Approved Collection.

(2) *Title of the Form/Collection:* Customer Profile Management System-IDENTity Verification Tool (CPMS–IVT).

(3) *Agency form number, if any, and the applicable component of the DHS sponsoring the collection:* M–1061; USCIS.

(4) *Affected public who will be asked or required to respond, as well as a brief abstract:* Primary: Individuals or households. Respondents subject to this information collection are individuals appearing at a USCIS District/Field Office for a required interview in connection with their request for an immigration or naturalization benefit, or in order to receive evidence of an immigration benefit such as a temporary travel document, parole authorization, temporary extension of a I–90, or temporary I–551 stamp in a passport or on a Form I–94 evidencing lawful permanent residence. Respondents are required to have their photograph and fingerprints taken at the USCIS District/Field Office to be inputted into the Customer Profile Management System-IDENTity Verification Tool (CPMS–IVT). The only U.S. citizen respondents subject to enrollment in CPMS–IVT are petitioners filing orphan or adoption petitions (Forms I–600/600A) and U.S. citizen petitioners of family-based petitions required to appear at an ASC for biometric capture for purposes of complying with the Adam Walsh Child Protection and Safety Act of 1996, Public Law 109–248.

(5) *An estimate of the total number of respondents and the amount of time estimated for an average respondent to respond:* The estimated total number of respondents for the information collection M–1061 is 1,500,000 who respond 2 times annually and the estimated hour burden per response is .083 hours.

(6) *An estimate of the total public burden (in hours) associated with the collection:* The total estimated annual hour burden associated with this collection is 249,000 hours.

(7) *An estimate of the total public burden (in cost) associated with the collection:* The estimated total annual cost burden associated with this collection of information is $0.

Dated: April 8, 2024.

Samantha L Deshommes,

Chief, Regulatory Coordination Division, Office of Policy and Strategy, U.S. Citizenship and Immigration Services, Department of Homeland Security.

[FR Doc. 2024–07890 Filed 4–12–24; 8:45 am]

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DEPARTMENT OF HOMELAND SECURITY

U.S. Citizenship and Immigration Services

[CIS No. 2768–24; DHS Docket No. USCIS–2022–0014]

RIN 1615–ZB96

Extension and Redesignation of Ethiopia for Temporary Protected Status

AGENCY: U.S. Citizenship and Immigration Services (USCIS), Department of Homeland Security (DHS).

ACTION: Notice of Temporary Protected Status (TPS) extension and redesignation.

SUMMARY: Through this notice, the Department of Homeland Security (DHS) announces that the Secretary of Homeland Security (Secretary) is extending the designation of Ethiopia for Temporary Protected Status (TPS) for 18 months, beginning on June 13, 2024, and ending on December 12, 2025. This extension allows existing TPS beneficiaries to retain TPS through December 12, 2025, if they otherwise continue to meet the eligibility requirements for TPS. Existing TPS beneficiaries who wish to extend their status through December 12, 2025, must re-register during the 60-day re-registration period described in this notice. The Secretary is also redesignating Ethiopia for TPS. The redesignation of Ethiopia allows additional Ethiopian nationals (and individuals having no nationality who last habitually resided in Ethiopia) who have been continuously residing in the United States since April 11, 2024, to apply for TPS for the first time during the initial registration period described under the redesignation information in this notice. In addition to demonstrating continuous residence in the United States since April 11, 2024, and meeting other eligibility criteria, initial applicants for TPS under this designation must demonstrate that they have been continuously physically present in the United States since June 13, 2024, the effective date of this redesignation of Ethiopia for TPS.

DATES: *Extension and Redesignation of Designation of Ethiopia for TPS* begins on June 13, 2024, and will remain in effect for 18 months. For registration instructions, see the Registration Information section below.

FOR FURTHER INFORMATION CONTACT:

- You may contact Rená Cutlip-Mason, Chief, Humanitarian Affairs Division, Office of Policy and Strategy, U.S. Citizenship and Immigration Services, Department of Homeland Security, by mail at 5900 Capital Gateway Drive, Camp Springs, MD 20746, or by phone at 240–721–3000.
- For more information on TPS, including guidance on the registration process and additional information on eligibility, please visit the USCIS TPS web page at *https://www.uscis.gov/tps.* You can find specific information about Ethiopia's TPS designation by selecting ''Ethiopia'' from the menu on the left side of the TPS web page.
- If you have additional questions about TPS, please visit *https://uscis.gov/tools.* Our online virtual assistant, Emma, can answer many of your questions and point you to additional information on our website. If you cannot find your answers there, you may also call our USCIS Contact Center at 800–375–5283 (TTY 800–767–1833).
- Applicants seeking information about the status of their individual cases may check Case Status Online, available on the USCIS website at *https://uscis.gov,* or visit the USCIS Contact Center at *https://www.uscis.gov/contactcenter.*
- You can also find more information at local USCIS offices after this notice is published.

SUPPLEMENTARY INFORMATION:

Table of Abbreviations

BIA—Board of Immigration Appeals
CFR—Code of Federal Regulations
DHS—U.S. Department of Homeland Security
DoS—U.S. Department of State
EAD—Employment Authorization Document
FNC—Final Nonconfirmation
Form I–131—Application for Travel Document
Form I–765—Application for Employment Authorization
Form I–797—Notice of Action
Form I–821—Application for Temporary Protected Status
Form I–9—Employment Eligibility Verification
Form I–912—Request for Fee Waiver
Form I–94—Arrival/Departure Record
FR—Federal Register
Government—U.S. Government
IER—U.S. Department of Justice, Civil Rights Division, Immigrant and Employee Rights Section
IJ—Immigration Judge
INA—Immigration and Nationality Act
SAVE—USCIS Systematic Alien Verification for Entitlements Program
Secretary—Secretary of Homeland Security
TPS—Temporary Protected Status
TTY—Text Telephone
USCIS—U.S. Citizenship and Immigration Services
U.S.C.—United States Code

Registration Information

Extension of Designation of Ethiopia for TPS: The 18-month designation of Ethiopia for TPS begins on June 13, 2024, and will remain in effect for 18 months, ending on December 12, 2025. The extension impacts existing beneficiaries of TPS.

Re-registration: The 60-day re-registration period for existing beneficiaries runs from April 15, 2024 through June 14, 2024. (Note: It is important for re-registrants to timely re-register during the registration period and not to wait until their Employment Authorization Documents (EADs) expire, as delaying re-registration could result in gaps in their employment authorization documentation.)

Redesignation of Ethiopia for TPS: The 18-month redesignation of Ethiopia for TPS begins on June 13, 2024, and will remain in effect for 18 months, ending on December 12, 2025. The redesignation impacts potential first-time applicants and others who do not currently have TPS.

First-time Registration: The initial registration period for new applicants under the Ethiopia TPS redesignation begins on April 15, 2024 and will remain in effect through December 12, 2025.

Purpose of This Action (TPS)

Through this notice, DHS sets forth procedures necessary for nationals of Ethiopia (or individuals having no nationality who last habitually resided in Ethiopia) to (1) re-register for TPS and apply to renew their EAD with USCIS or (2) submit an initial registration application under the redesignation and apply for an EAD.

Re-registration is limited to individuals who have previously registered for TPS under the prior designation of Ethiopia and whose applications have been granted. If you do not re-register properly within the 60-day re-registration period, USCIS may withdraw your TPS following appropriate procedures. *See* 8 CFR 244.14.

For individuals who have already been granted TPS under Ethiopia's designation, the 60-day re-registration period runs from April 15, 2024, through June 14, 2024. USCIS will issue new EADs with a December 12, 2025, expiration date to eligible Ethiopian

TPS beneficiaries who timely re-register and apply for EADs. Given the time frames involved with processing TPS re-registration applications, DHS recognizes that not all re-registrants may receive a new EAD before their current EAD expires. Accordingly, through this **Federal Register** notice, DHS automatically extends through June 12, 2025, the validity of EADs previously issued under the TPS designation of Ethiopia. As proof of continued employment authorization through June 12, 2025, TPS beneficiaries can show their EAD with the notation A–12 or C–19 under Category and a ''Card Expires'' date of June 12, 2024. This notice explains how TPS beneficiaries and their employers may determine if an EAD is automatically extended and how this affects the Form I–9, Employment Eligibility Verification, E-Verify, and USCIS Systematic Alien Verification for Entitlements (SAVE) processes.

Individuals who have an Application for Temporary Protected Status (Form I–821) or Application for Employment Authorization (Form I–765) that was still pending as of April 15, 2024, do not need to file either application again. If USCIS approves an individual's pending Form I–821, USCIS will grant the individual TPS through December 12, 2025. Similarly, if USCIS approves a pending TPS-related Form I–765, USCIS will issue the individual a new EAD that will be valid through the same date.

Under the redesignation, individuals who currently do not have TPS may submit an initial application during the initial registration period that runs from April 15, 2024, through the full length of the redesignation period ending December 12, 2025. In addition to demonstrating continuous residence in the United States since April 11, 2024, and meeting other eligibility criteria, initial applicants for TPS under this redesignation must demonstrate that they have been continuously physically present in the United States since June 13, 2024,[1] the effective date of this redesignation of Ethiopia, before USCIS may grant them TPS. DHS estimates that approximately 12,800 individuals may become newly eligible for TPS under the redesignation of Ethiopia.

What is Temporary Protected Status (TPS)?

- TPS is a temporary immigration status granted to eligible nationals of a foreign state designated for TPS under the INA, or to eligible individuals without nationality who last habitually resided in the designated foreign state, regardless of their country of birth.
- During the TPS designation period, TPS beneficiaries are eligible to remain in the United States, may not be removed, and are authorized to obtain EADs if they continue to meet the requirements of TPS.
- TPS beneficiaries may also apply for and be granted travel authorization as a matter of DHS discretion.
- To qualify for TPS, beneficiaries must meet the eligibility standards at INA section 244(c)(1)–(2), 8 U.S.C. 1254a(c)(1)–(2).
- When the Secretary terminates a foreign state's TPS designation, beneficiaries return to one of the following:
  - The same immigration status or category that they maintained before TPS, if any (unless that status or category has since expired or terminated); or
  - Any other lawfully obtained immigration status or category they received while registered for TPS, if it is still valid beyond the date their TPS terminates.

When was Ethiopia designated for TPS?

Ethiopia was initially designated on December 12, 2022, on the basis of ongoing armed conflict and extraordinary and temporary conditions in Ethiopia that prevented nationals of Ethiopia from returning in safety. *See Designation of Ethiopia for Temporary Protected Status,* 87 FR 76074 (December 12, 2022).

What authority does the Secretary have to extend the designation of Ethiopia for TPS?

Section 244(b)(1) of the INA, 8 U.S.C. 1254a(b)(1), authorizes the Secretary, after consultation with appropriate agencies of the U.S. Government, to designate a foreign state (or part thereof) for TPS if the Secretary determines that certain country conditions exist.[2] The decision to designate any foreign state (or part thereof) is a discretionary decision, and there is no judicial review of any determination with respect to the designation, termination, or extension of a designation. *See* INA sec. 244(b)(5)(A), 8 U.S.C. 1254a(b)(5)(A). The Secretary, in their discretion, may then grant TPS to eligible nationals of that foreign state (or individuals having no nationality who last habitually resided in the designated foreign state). *See* INA sec. 244(a)(1)(A), 8 U.S.C. 1254a(a)(1)(A).

At least 60 days before the expiration of a foreign state's TPS designation or extension, the Secretary, after consultation with appropriate U.S. Government agencies, must review the conditions in the foreign state designated for TPS to determine whether they continue to meet the conditions for the TPS designation. *See* INA sec. 244(b)(3)(A), 8 U.S.C. 1254a(b)(3)(A). If the Secretary determines that the foreign state continues to meet the conditions for TPS designation, the designation will be extended for an additional period of 6 months or, in the Secretary's discretion, 12 or 18 months. *See* INA sec. 244(b)(3)(A), (C), 8 U.S.C. 1254a(b)(3)(A), (C). If the Secretary determines that the foreign state no longer meets the conditions for TPS designation, the Secretary must terminate the designation. *See* INA sec. 244(b)(3)(B), 8 U.S.C. 1254a(b)(3)(B).

What is the Secretary's authority to redesignate Ethiopia for TPS?

In addition to extending an existing TPS designation, the Secretary, after consultation with appropriate Government agencies, may redesignate a country (or part thereof) for TPS. *See* INA sec. 244(b)(1), 8 U.S.C. 1254a(b)(1); *see also* INA sec. 244(c)(1)(A)(i), 8 U.S.C. 1254a(c)(1)(A)(i) (requiring that ''the alien has been continuously physically present since the effective date of *the most recent designation of the state*'') (emphasis added).[3]

[1] The ''continuous physical presence'' date is the effective date of the most recent TPS designation of the country, which is either the publication date of the designation announcement in the **Federal Register** or a later date established by the Secretary. The ''continuous residence'' date is any date established by the Secretary when a country is designated (or sometimes redesignated) for TPS. *See* INA sec. 244(b)(2)(A) (effective date of designation); 244(c)(1)(A)(i–ii) (continuous residence and continuous physical presence date requirements); 8 U.S.C. 1254a(b)(2)(A); 1254a(c)(1)(A)(i–ii).

[2] INA section 244(b)(1) ascribes this power to the Attorney General. Congress transferred this authority from the Attorney General to the Secretary of Homeland Security. *See* Homeland Security Act of 2002, Pub. L. 107–296, 116 Stat. 2135 (2002). The Secretary may designate a country (or part of a country) for TPS on the basis of ongoing armed conflict such that returning would pose a serious threat to the personal safety of the country's nationals and habitual residents, environmental disaster (including an epidemic), or extraordinary and temporary conditions in the country that prevent the safe return of the country's nationals. For environmental disaster-based designations, certain other statutory requirements must be met, including that the foreign government must request TPS. A designation based on extraordinary and temporary conditions cannot be made if the Secretary finds that allowing the country's nationals to remain temporarily in the United States is contrary to the U.S. national interest. INA sec. 244(b)(1); 8 U.S.C. 1254a(b)(1).

[3] The extension and redesignation of TPS for Ethiopia is one of several instances in which the Secretary and, before the establishment of DHS, the Attorney General, have simultaneously extended a

Continued

When the Secretary designates or redesignates a country for TPS, the Secretary also has the discretion to establish the date from which TPS applicants must demonstrate that they have been ''continuously resid[ing]'' in the United States. *See* INA sec. 244(c)(1)(A)(ii), 8 U.S.C. 1254a(c)(1)(A)(ii). The Secretary has determined that the ''continuous residence'' date for applicants for TPS under the redesignation of Ethiopia will be April 11, 2024. Initial applicants for TPS under this redesignation must also show they have been ''continuously physically present'' in the United States since June 13, 2024, which is the effective date of the Secretary's redesignation of Ethiopia. *See* INA sec. 244(c)(1)(A)(i), 8 U.S.C. 1254a(c)(1)(A)(i). For each initial TPS application filed under the redesignation, USCIS cannot make the final determination of whether the applicant has met the ''continuous physical presence'' requirement until June 13, 2024, the effective date of this redesignation for Ethiopia. USCIS, however, will issue employment authorization documentation, as appropriate, during the registration period in accordance with 8 CFR 244.5(b).

Why is the Secretary extending the TPS designation for Ethiopia and simultaneously redesignating Ethiopia for TPS through December 12, 2025?

DHS has reviewed country conditions in Ethiopia. Based on the review, including input received from Department of State (DoS) and other U.S. Government agencies, the Secretary has determined that an 18-month TPS extension is warranted because ongoing armed conflict and extraordinary and temporary conditions supporting Ethiopia's TPS designation remain. The Secretary has further determined that redesignating Ethiopia for TPS under INA section 244(b)(3)(C), 8 U.S.C. 1254a(b)(3)(C) is warranted and is changing the continuous residence and continuous physical presence dates that applicants must meet to be eligible for TPS.

Overview

Ethiopia continues to face internal armed conflict in Amhara and violence in multiple other regions of the country.[4] Human rights abuses by armed actors are prevalent, and civilians are facing indiscriminate attacks.[5] Droughts, floods, and disease outbreaks have put millions of people's lives and livelihoods at risk.[6] These overlapping humanitarian crises have resulted in ''ongoing high and urgent humanitarian needs.'' [7]

Armed Conflict

There is an ongoing armed conflict in Amhara between the Ethiopian National Defense Force (ENDF) and the Fano militia, a non-state militia in Amhara.[8] In April 2023, the government of Ethiopia declared that all regional security forces would be incorporated into the national security services, and this decision caused violent backlash.[9] The rising insecurity and violence led the Ethiopian government to declare a state of emergency in August 2023.[10] Civilian casualties have been reported. In November 2023, there were multiple drone strikes that killed 26 civilians and injured 14 in their homes, at a primary school, and a bus station.[11]

Violence and Human Rights

Violent clashes between the Ethiopian federal government and the Oromo Liberation Front-Shane (also known as the Oromo Liberation Army) increased in May 2023 in Oromia following failed peace talks, rivaling the levels of violence in 2022.[12] In regions impacted by inter-communal violence, like Oromia, Northern Ethiopia, and along the border between the Somali and Afar regions, state forces and non-state armed groups are reportedly attacking civilians.[13] Security forces are also reportedly committing extrajudicial killings and using excessive force.[14]

In Tigray, conditions remain fragile even after the Ethiopian federal government and the Tigray People's Liberation Front (TPLF) signed the Cessation of Hostilities Agreement (COHA) in November 2022.[15] Although the number of atrocities in Tigray has decreased since the signing of the COHA, armed actors, such as Eritrean security forces, Amhara forces, and Fano militia, continue to abuse human rights.[16] Incidences of sexual violence, predominately perpetrated by Eritrean or Ethiopian armed forces, have been documented in Tigray.[17] The International Commission of Human Rights Experts for Ethiopia estimates there were at least 10,000 survivors of conflict-related sexual violence (CRSV) in Tigray alone who sought support between November 2020 and June 2023.[18] Other reported abuses against civilians include ethnic cleansing of Tigrayan civilians from Western Tigray by members of Amhara forces.[19]

Environmental Disasters

Severe drought, which began in late 2020, expanded in 2023, mainly due to

country's TPS designation and redesignated the country for TPS. *See, e.g., Extension and Redesignation of Haiti for Temporary Protected Status,* 76 FR 29000 (May 19, 2011); *Extension and Re-designation of Temporary Protected Status for Sudan,* 69 FR 60168 (Oct. 7, 2004); *Extension of Designation and Redesignation of Liberia Under Temporary Protected Status Program,* 62 FR 16608 (Apr. 7, 1997).

[4] Center for Preventative Action, Conflict in Ethiopia, last updated Dec. 19, 2023, available at: *https://www.cfr.org/global-conflict-tracker/conflict/conflict-ethiopia* (last visited Dec. 22, 2023).

[5] *See* UN Human Rights Council, The acute risk of further atrocity crimes in Ethiopia: an analysis, October 3, 2023, 2, *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf.*

[6] UNHCR, Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, Nov. 3, 2023, 4, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited Dec. 18, 2023).

[7] *Id.*

[8] Reuters, *Ethiopian military clashes with militia in Amhara, injuries reported,* Aug. 2, 2023, available at *https://www.reuters.com/world/africa/ethiopian-military-clashes-with-militia-amhara-residents-say-2023-08-02/* (last visited Dec. 18, 2023).

[9] *Id.*

[10] UN Human Rights Council, The acute risk of further atrocity crimes in Ethiopia: an analysis, Oct. 3, 2023, 2, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf.*

[11] OHCHR, Ethiopia: Violence in Amhara region, Nov. 17, 2023, available at *https://www.ohchr.org/en/statements/2023/11/ethiopia-violence-amhara-region* (last visited Dec. 19, 2023).

[12] ACLED-Ethiopia Peace Observatory, EPO May 2023 Monthly: Violence Returns to Oromia Despite Attempted Peace Talks, June 22, 2023, *https://epo.acleddata.com/2023/06/22/epo-may-2023-monthly-violence-returns-to-oromia-despite-attempted-peace-talks/* (last visited on Dec. 18, 2023).

[13] UNHCR, Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, Nov. 3, 2023, 5, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited Dec. 18, 2023).

[14] *Id.*

[15] UN Human Rights Council, The acute risk of further atrocity crimes in Ethiopia: an analysis, Oct. 3, 2023, 2, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf.*

[16] UN Human Rights Council, The acute risk of further atrocity crimes in Ethiopia: an analysis, Oct. 3, 2023, 2, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/A-HRC-54-CRP-2.pdf;* UNHCR, Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, Nov. 3, 2023, 4, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited Dec. 18, 2023).

[17] Physicians for Human Rights, Broken Promises: Conflict-Related Sexual Violence Before and After the Cessation of Hostilities Agreement in Tigray, Ethiopia, Aug. 24, 2023, available at *https://phr.org/our-work/resources/medical-records-sexual-violence-tigray-ethiopia/* (last visited Dec. 18, 2023).

[18] UN Human Rights Council, Comprehensive investigative findings and legal determinations, Oct. 13, 2023, 25–26, available at *https://www.ohchr.org/sites/default/files/documents/hrbodies/hrcouncil/chreetiopia/a-hrc-54-crp-3.pdf.*

[19] Human Rights Watch, Ethiopia: Ethnic Cleansing Persists Under Tigray Truce, June 1, 2023, available at: *https://www.hrw.org/news/2023/06/01/ethiopia-ethnic-cleansing-persists-under-tigray-truce* (last visited Jan. 29, 2024).

five consecutive weak-to-failed rainy seasons.[20] In the Amhara and Tigray regions, approximately 5 million people have been negatively affected by the drought-like conditions.[21] Millions of Ethiopians who rely on livestock have had their livelihoods damaged.[22] As such, food insecurity has increased, and hundreds of thousands of people have been displaced as they search for new places to survive.[23] Furthermore, a cholera outbreak has affected these drought-stricken areas.[24]

Flooding has also caused significant harm to the lives of many Ethiopians. Between October and November 2023, flooding and mudslides from heavy rainfall and river overflows affected an estimated 1.5 million people, mainly in the Somali, Oromia, Afar, South Ethiopia, and Gambella regions of the country.[25] The Somali region alone accounted for over one million of the flood-affected people.[26] Moreover, the Oromia and Southern Ethiopia regions faced significant displacement, damaged farmland, and adversely impacted social infrastructures as a result of the flooding.[27] Health facilities have also been damaged by the floods, and thus these populations do not have access to basic health services.[28]

Internal Displacement

Ethiopia continues to face massive displacement of persons for numerous reasons, including violence and climate events.[29] As of June 2023, there were an estimated 4.3 million internally displaced persons (IDPs) in Ethiopia.[30] Around 2.9 million of those IDPs are a result of conflict—a 57% increase since January 31, 2023.[31] IDPs due to droughts totaled 810,855 as of June 2023, and people displaced by floods totaled 613,000 in November 2023.[32]

Food Insecurity

Throughout 2023, food insecurity continued to be a major concern in Ethiopia due to multiple challenges, including ongoing conflict, drought-like conditions, and a pause in international food assistance due to food aid diversion and corruption.[33] Nearly 20.1 million people are in need of food assistance and 7.4 million women and children are malnourished.[34] 3.5 million people in Amhara are in need of assistance because the ongoing insecurity in the Amhara region has disrupted farming activities.[35] International donors suspended food aid distributions in June 2023 due to reports of large-scale theft of food aid allegedly perpetrated by federal and regional entities in Ethiopia.[36] Food aid to Ethiopia resumed in December 2023 after the government of Ethiopia agreed to substantial reforms of the food assistance structure.[37]

Communicable Diseases Outbreaks

Ethiopia faced four outbreaks of communicable diseases in 2023: cholera, measles, malaria, and dengue.[38] Cholera, malaria, and measles continue to be problems in 2024.[39] Responding to these outbreaks has been difficult due to ''[l]imited access to health services, medical supplies, WASH [Water, sanitation and hygiene] services, and trained health care workers[.]'' [40]

The current cholera outbreak has been ongoing since August 2022 when the first case of cholera was reported, making this among the longest outbreaks ever in Ethiopia.[41] In December 2023, the World Health Organization (WHO) reported that due to floods, cholera deaths increased by 12% in November when compared to October.[42] As of early February 2024, 34,000 cholera cases had been reported, including 504 deaths.[43] While 7.1 million people have been vaccinated as of November 18, 2023, sustainable solutions to address root causes of cholera still need to be addressed.[44]

A measles outbreak, which began in August 2021, is active in 71 districts.[45] In the first ten months of 2023, there were nearly 20,800 measles cases reported, including 159 deaths.[46] As of

[20] UNHCR, Ethiopia: Protection Cluster National Strategy 2023–2023, Protection Cluster, Nov. 3, 2023, 4, available at *https://reliefweb.int/report/ethiopia/ethiopia-protection-cluster-national-strategy-2023-2025* (last visited Dec. 18, 2023).

[21] UN Population Fund, UNFPA Ethiopia Humanitarian Response Situation Report—October 2023, Nov. 30, 2023, *https://reliefweb.int/report/ethiopia/unfpa-ethiopia-humanitarian-response-situation-report-october-2023* (last visited Dec. 19, 2023).

[22] UNOCHA, Humanitarian Response Plan Ethiopia, Feb. 28, 2023, 4, available at *https://humanitarianaction.info/plan/1128?bs=eyJibG9jay05YTI0NGYzYy1jZmQ4LTRjZTAtOTRmOC0yOWYzZjIxOGRmM2YiOnsidGFyZ2V0IjowfX0%3D* (last visited on Dec. 18, 2023).

[23] *Id.*

[24] UNOCHA, Ethiopia Situation Report, Dec. 1, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-situation-report-1-dec-2023* (last visited Feb. 28, 2024).

[25] *Id.*

[26] *Id.*

[27] UNOCHA, Ethiopia: Floods, Flash Update 32, Nov. 16, 2023, 4–5, *https://reliefweb.int/report/ethiopia/ethiopia-floods-flash-update-2-15-november-2023* (last visited on Dec. 20, 2023).

[28] Health Cluster, WHO, Ethiopia Health Cluster Bulletin, Dec. 1, 2023, 1, *https://reliefweb.int/report/ethiopia/ethiopia-health-cluster-bulletin-november-2023* (last visited on Dec. 19, 2023).

[29] IOM, Ethiopia National Displacement Report 16—Site Assessment Round 33 and Village Assessment survey Round 16: November 2022–June 2023, Aug. 22, 2023, available at: Ethiopia National Displacement Report 16—Site Assessment Round 33 and Village Assessment Survey Round 16: November 2022–June 2023—Ethiopia | ReliefWeb (last visited Jan. 29, 2024).

[30] *Id.*

[31] UNOCHA, Ethiopia, available at *https://m.reliefweb.int/country/87/eth?figures-display=all* (last visited Dec. 19, 2023).

[32] *Id.*

[33] Associated Press, *U.S. will resume food aid to millions in Ethiopia after monthslong pause over massive corruption,* Nov. 15, 2023, available at: *https://www.pbs.org/newshour/world/u-s-will-resume-food-aid-to-millions-in-ethiopia-after-monthslong-pause-over-massive-corruption#:~:text=USAID%20and%20the%20U.N.%E2%80%99s%20World%20Food%20Program%20suspended,country%20for%20interrupting%20their%20oversight%20of%20aid%20delivery* (last visited Dec. 19, 2023); World Food Programme, WFP Ethiopia Country Brief, September 2023, available at *https://docs.wfp.org/api/documents/WFP-0000154798/download/?_ga=2.168713697.1310415555.1702745002-257522247.1691073788* (last visited Dec. 16, 2023).

[34] UN World Food Programme, Ethiopia, available at: *https://www.wfp.org/countries/ethiopia* (last visited Dec. 16, 2023).

[35] UN Population Fund, Ethiopia Humanitarian Response Situation Report—October 2023, Nov. 30, 2023, 1, *https://ethiopia.unfpa.org/en/resources/unfpa-ethiopia-humanitarian-situation-reportoctober-2023* (last visited on Dec. 19, 2023).

[36] Reuters, *UN agency joins US in suspending food aid to Ethiopia after diversions,* June 9, 2023, available at *https://www.reuters.com/world/africa/wfp-suspends-food-aid-ethiopia-after-diversions-2023-06-09/* (last visited Dec. 22, 2023).

[37] USAID, *USAID Resumes Food Assistance for People Across Ethiopia Following Implementation of Comprehensive Reforms,* Nov. 14, 2023, available at *https://www.usaid.gov/news-information/press-releases/nov-14-2023-usaid-resumes-food-assistance-people-across-ethiopia-following-implementation-comprehensive-reforms* (last visited Dec. 18, 2023).

[38] World Health Organization, Northern Ethiopia—Public Health Situation Analysis, Sept. 22, 2023, 2, *https://reliefweb.int/report/ethiopia/northern-ethiopia-public-health-situation-analysis-phsa-25-august-2023* (last visited on Dec. 19, 2023).

[39] UNOCHA, Ethiopia Situation Report, last updated Feb. 16, 2024, available at *https://reports.unocha.org/en/country/ethiopia* (last visited Feb. 28, 2024).

[40] World Health Organization, Northern Ethiopia—Public Health Situation Analysis, Sept. 22, 2023, 2, *https://reliefweb.int/report/ethiopia/northern-ethiopia-public-health-situation-analysis-phsa-25-august-2023* (last visited on Dec. 19, 2023).

[41] ECHO, *Ethiopia—Cholera outbreak,* Sept. 6, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-cholera-outbreak-dg-echo-un-ocha-echo-daily-flash-06-september-2023* (last visited on Dec. 19, 2023).

[42] Health Cluster, WHO, Ethiopia Health Cluster Bulletin, Dec. 1, 2023, 1, *https://reliefweb.int/report/ethiopia/ethiopia-health-cluster-bulletin-november-2023* (last visited on Dec. 19, 2023).

[43] UNOCHA, Ethiopia Situation Report, last updated Feb. 16, 2024, available at *https://reports.unocha.org/en/country/ethiopia* (last visited Feb. 28, 2024).

[44] UNOCHA, Ethiopia Situation Report, Dec. 1, 2023, available at *https://reliefweb.int/report/ethiopia/ethiopia-situation-report-1-dec-2023* (last visited Feb. 28, 2024).

[45] UNOCHA, Ethiopia Situation Report, last updated Feb. 16, 2024, available at *https://reports.unocha.org/en/country/ethiopia* (last visited Feb. 28, 2024).

[46] UNOCHA, Ethiopia Situation Report, Dec. 1, 2023, available at *https://reliefweb.int/report/*

Continued

early February 2024, most new cases reported are from Oromia, Sidama, Central, and Southwest.[47]

Mosquito-borne diseases are also affecting several regions in Ethiopia. In 2023, 4.1 million malaria cases were reported throughout Ethiopia.[48] In April 2023, a dengue fever outbreak began in the Afar region and subsequently spread to the Dire Dewa, Oromia, and Somali regions.[49] Cases increased from 6,238 as of late June 2023 to 10,165 as of early October 2023.[50]

Based on this review and after consultation with appropriate U.S. Government agencies, the Secretary has determined that:

- The conditions supporting Ethiopia's designation for TPS continue to be met. *See* INA sec. 244(b)(3)(A) and (C), 8 U.S.C. 1254a(b)(3)(A) and (C).
- There continues to be an ongoing armed conflict in Ethiopia and, due to such conflict, requiring the return to Ethiopia of Ethiopian nationals (or individuals having no nationality who last habitually resided in Ethiopia) would pose a serious threat to their personal safety. *See* INA sec. 244(b)(1)(A), 8 U.S.C. 1254a(b)(1)(A).
- There continue to be extraordinary and temporary conditions in Ethiopia that prevent Ethiopian nationals (or individuals having no nationality who last habitually resided in Ethiopia) from returning to Ethiopia in safety, and it is not contrary to the national interest of the United States to permit Ethiopian TPS beneficiaries to remain in the United States temporarily. *See* INA sec. 244(b)(1)(C), 8 U.S.C. 1254a(b)(1)(C).
- The designation of Ethiopia for TPS should be extended for an 18-month period, beginning on June 13, 2024, and ending on December 12, 2025. *See* INA sec. 244(b)(3)(C), 8 U.S.C. 1254a(b)(3)(C).
- Due to the conditions described above, Ethiopia should be simultaneously extended and redesignated for TPS beginning on June 13, 2024, and ending on December 12, 2025. *See* INA sec. 244(b)(1)(A) and (C) and (b)(2), 8 U.S.C. 1254a(b)(1)(A) and (C) and (b)(2).
- For the redesignation, the Secretary has determined that TPS applicants must demonstrate that they have continuously resided in the United States since April 11, 2024.
- Initial TPS applicants under the redesignation must demonstrate that they have been continuously physically present in the United States since June 13, 2024, the effective date of the redesignation of Ethiopia for TPS.
- There are currently approximately 2,300 beneficiaries under Ethiopia's TPS designation who are eligible to re-register for TPS under the extension.
- It is estimated that approximately 12,800 additional individuals may be eligible for TPS under the redesignation of Ethiopia. This population includes Ethiopian nationals in the United States in nonimmigrant status or without immigration status.

Notice of the Designation of Ethiopia for TPS

By the authority vested in me as Secretary under INA section 244, 8 U.S.C. 1254a, I have determined, after consultation with the appropriate U.S. Government agencies, the statutory conditions supporting Ethiopia's designation for TPS on the basis of ongoing armed conflict and extraordinary and temporary conditions are met, and it is not contrary to the national interest of the United States to allow Ethiopian TPS beneficiaries to remain in the United States temporarily. *See* INA sec. 244(b)(1)(A) and (C), 8 U.S.C. 1254a(b)(1)(A) and (C). On the basis of this determination, I am simultaneously extending the existing designation of Ethiopia for TPS for 18 months, beginning on June 13, 2024, and ending on December 12, 2025, and redesignating Ethiopia for TPS for the same 18-month period. *See* INA sec. 244(b)(1)(A) and (C) and (b)(2); 8 U.S.C. 1254a(b)(1)(A) and (C), and (b)(2).

Alejandro N. Mayorkas,

Secretary, U.S. Department of Homeland Security.

Eligibility and Employment Authorization for TPS

Required Application Forms and Application Fees to Register or Re-Register for TPS

To register or re-register for TPS based on the designation of Ethiopia, you must submit a Form I–821. If you are submitting an initial TPS application, you must pay the application fee for Form I–821 (or request a fee waiver, which you may submit on Form I–912, Request for Fee Waiver). If you are filing an application to re-register for TPS, you do not need to pay the application fee. Whether you are registering as an initial applicant or re-registering, you are required to pay the biometric services fee. If you cannot pay the biometric services fee, you may ask USCIS to waive the fee. Please see additional information under the ''Biometric Services Fee'' section of this notice.

TPS beneficiaries are eligible for an Employment Authorization Document (EAD), which proves their authorization to work in the United States. You are not required to submit Form I–765 or have an EAD to be granted TPS, but see below for more information if you want an EAD to use as proof that you can work in the United States.

Individuals who have an Ethiopia TPS application (Form I–821) that was still pending as of April 15, 2024, do not need to file the application again. If USCIS approves an individual's Form I–821, USCIS will grant the individual TPS through December 12, 2025.

For more information on the application forms and fees for TPS, please visit the USCIS TPS web page at *https://www.uscis.gov/tps.* Fees for the Form I–821 and Form I–765 and the biometric services fee are also described in 8 CFR 106.2 and the fee waiver-related regulations in 8 CFR 106.3 (Apr. 1, 2024). In addition, USCIS Form G–1055, Fee Schedule, provides the current fees required for the Form I–821 and Form I–765 for both initial TPS applicants and existing TPS beneficiaries who are re-registering.

How can TPS Beneficiaries Obtain an Employment Authorization Document (EAD)?

Everyone must provide their employer with documentation showing that they have the legal right to work in the United States. TPS beneficiaries are eligible to obtain an EAD, which proves their legal right to work. If you want to obtain an EAD, you must file Form I–765 and pay the Form I–765 fee (or request a fee waiver, which you may submit on Form I–912). TPS applicants may file this form with their TPS application, or separately later, if their TPS application is still pending or has been approved.

Beneficiaries with an Ethiopia TPS-related Form I–765 that was still pending as of April 15, 2024 do not need to file the application again. If USCIS approves a pending TPS-related Form I–765, USCIS will issue the individual a new EAD that will be valid through December 12, 2025.

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ethiopia/ethiopia-situation-report-1-dec-2023 (last visited Feb. 28, 2024).

[47] UNOCHA, Ethiopia Situation Report, last updated Feb. 16, 2024, available at *https://reports.unocha.org/en/country/ethiopia* (last visited Feb. 28, 2024).

[48] Health Cluster, WHO, Ethiopia Health Cluster Bulletin, Feb. 1, 2024, 4, *https://reliefweb.int/report/ethiopia/ethiopia-health-cluster-bulletin-november-2023* (last visited on Feb. 28, 2024).

[49] WHO, Weekly Bulletin on Outbreaks and other Emergencies, Nov. 7, 2023, *https://reliefweb.int/report/ethiopia/weekly-bulletin-outbreaks-and-other-emergencies-week-41-09-october-15-october-2023-data-reported-1700-15-october-2023* (last visited Dec. 8, 2023).

[50] Health Cluster, WHO, Ethiopia Health Cluster Bulletin, Oct. 6, 2023, 1, available at *https://reliefweb.int/report/ethiopia/ethiopia-health-cluster-bulletin-quarter-3-july-september-2023-6-october-2023* (last visited Dec. 19, 2023).

Refiling an Initial TPS Registration Application After Receiving a Denial of a Fee Waiver Request

If USCIS denies your fee waiver request, you can resubmit your TPS application. The fee waiver denial notice will contain specific instructions about resubmitting your application.

Filing Information

USCIS offers the option to applicants for TPS under Ethiopia's designation to file Form I–821 and related requests for EADs online or by mail. However, if you request a fee waiver, you must submit your application by mail. When filing a TPS application, you may request an EAD by submitting a completed Form I–765 with your Form I–821.

Online filing: Form I–821 and Form I–765 are available for concurrent filing online.[51] To file these forms online, you must first create a USCIS online account.[52]

Mail filing: Mail your completed Form I–821; Form I–765, if applicable; Form I–912, if applicable; and supporting documentation to the proper address in Table 1—Mailing Addresses.

TABLE 1—MAILING ADDRESSES

If you . . .	Mail to . . .
Are using the U.S. Postal Service (USPS)	USCIS, Attn: TPS Ethiopia, P.O. Box 8635, Chicago, IL 60680–8635.
Are using FedEx, UPS, or DHL deliveries	USCIS, Attn: TPS Ethiopia (Box 8635), 131 South Dearborn Street—3rd Floor, Chicago, IL 60603–5517.

If you were granted TPS by an immigration judge (IJ) or the Board of Immigration Appeals (BIA) and you wish to request an EAD, please file online or mail your Form I–765 to the appropriate address in Table 1. If you file online, please include the fee. If you file by mail, please include the fee or fee waiver request. When you request an EAD based on an IJ or BIA grant of TPS, please include with your application a copy of the order from the IJ or BIA granting you TPS. This will help us verify your grant of TPS and process your application.

Supporting Documents

The filing instructions for Form I–821 list all the documents you need to establish eligibility for TPS. You may also find information on the acceptable documentation and other requirements for applying (also called registering) for TPS on the USCIS website at *https://www.uscis.gov/tps* under ''Ethiopia.''

Travel

TPS beneficiaries may also apply for and be granted travel authorization as a matter of discretion. You must file for travel authorization if you wish to travel outside of the United States. If USCIS grants travel authorization, it gives you permission to leave the United States and return during a specific period. To request travel authorization, you must file Form I–131, Application for Travel Document, available at *https://www.uscis.gov/i-131.* You may file Form I–131 together with your Form I–821 or separately. When you file Form I–131, you must:

- Select Item Number 1.d. in Part 2 on the Form I–131; and
- Submit the fee for Form I–131, or request a fee waiver, which you may submit on Form I–912.

If you are filing Form I–131 together with Form I–821, send your forms to the address listed in Table 1. If you are filing Form I–131 separately based on a pending or approved Form I–821, send your form to the address listed in Table 2 and include a copy of Form I–797 for your approved or pending Form I–821.

TABLE 2—MAILING ADDRESSES

If you . . .	Mail to . . .
Filing Form I–131 together with Form I–821	The address provided in Table 1.
Filing Form I–131 based on a pending or approved Form I–821, and you are using the U.S. Postal Service (USPS): You must include a copy of the Notice of Action (Form I–797C or I–797) showing USCIS accepted or approved your Form I–821.	USCIS, Attn: I–131 TPS, P.O. Box 660167, Dallas, TX 75266–0867.
Filing Form I–131 based on a pending or approved Form I–821, and you are using FedEx, UPS, or DHL: You must include a copy of the Notice of Action (Form I–797C or I–797) showing USCIS accepted or approved your Form I–821.	USCIS, Attn: I–131 TPS, 2501 S State Hwy., 121 Business, Ste. 400, Lewisville, TX 75067.

Biometric Services Fee for TPS

Biometrics (such as fingerprints) are required for all applicants, in addition to a biometric services fee. As previously stated, if you cannot pay the biometric services fee, you may request a fee waiver, which you may submit on Form I–912. For more information on the application forms and fees for TPS, please visit the USCIS TPS web page at *https://www.uscis.gov/tps.* USCIS may require you to visit an Application Support Center to submit your biometrics. For additional information on the USCIS biometric screening process, please see the USCIS Customer Profile Management Service Privacy Impact Assessment, available at *https://www.dhs.gov/publication/dhsuscispia-060-customer-profile-management-service-cpms.*

General Employment-Related Information for TPS Applicants and Their Employers

How can I obtain information on the status of my TPS application and EAD request?

To get case status information about your TPS application, as well as the status of your TPS-based EAD request, you can check Case Status Online at

[51] Find information about online filing at ''Forms Available to File Online,'' *https://www.uscis.gov/file-online/forms-available-to-file-online.*

[52] *https://myaccount.uscis.gov/users/sign_up.*

https://uscis.gov or visit the USCIS Contact Center at *https://www.uscis.gov/contactcenter.* If your Form I–765 has been pending for more than 90 days, and you still need assistance, you may ask a question about your case online at *https://egov.uscis.gov/e-request/Intro.do* or call the USCIS Contact Center at 800–375–5283 (TTY 800–767–1833).

Am I eligible to receive an automatic extension of my current EAD through June 12, 2025, through this Federal Register notice?

Yes. Regardless of your country of birth, if you currently have an Ethiopia TPS-based EAD with the notation A–12 or C–19 under Category and a ''Card Expires'' date of June 12, 2024, this **Federal Register** notice automatically extends your EAD through June 12, 2025. Although this **Federal Register** notice automatically extends your EAD through June 12, 2025, you must timely re-register for TPS in accordance with the procedures described in this **Federal Register** notice to maintain your TPS and employment authorization.

When hired, what documentation may I show to my employer as evidence of identity and employment authorization when completing Form I–9?

You can find the Lists of Acceptable Documents on Form I–9, Employment Eligibility Verification, as well as the Acceptable Documents web page at *https://www.uscis.gov/i-9-central/acceptable-documents.* Employers must complete Form I–9 to verify the identity and employment authorization of all new employees. Within three days of hire, employees must present acceptable documents to their employers as evidence of identity and employment authorization to satisfy Form I–9 requirements.

You may present any document from List A (which provides evidence of both identity and employment authorization) or one document from List B (which provides evidence of your identity) together with one document from List C (which provides evidence of employment authorization), or you may present an acceptable receipt as described in these lists. Employers may not reject a document based on a future expiration date. You can find additional information about Form I–9 on the I–9 Central web page at *https://www.uscis.gov/I-9Central.* An EAD is an acceptable document under List A. See the section ''How do my employer and I complete Form I–9 using my automatically extended EAD for a new job?'' of this **Federal Register** notice for more information. If your EAD states A–12 or C–19 under Category and has a ''Card Expires'' date of June 12, 2024, this **Federal Register** notice extends it automatically, and you may choose to present your EAD to your employer as proof of identity and employment eligibility for Form I–9 through June 12, 2025, unless your TPS has been withdrawn or your request for TPS has been denied. Your country of birth noted on the EAD does not have to reflect the TPS-designated country of Ethiopia for you to be eligible for this extension.

What documentation may I present to my employer for Form I–9 if I am already employed but my current TPS-related EAD is set to expire?

Even though we have automatically extended your EAD, your employer is required by law to ask you about your continued employment authorization. Your employer may need to re-examine your automatically extended EAD to check the ''Card Expires'' date and Category code if your employer did not keep a copy of your EAD when you initially presented it. Once your employer has reviewed the ''Card Expires'' date and Category code, they should update the EAD expiration date in Section 2 of Form I–9. See the section ''What updates should my current employer make to Form I–9 if my EAD has been automatically extended?'' of this **Federal Register** notice for more information. You may show this **Federal Register** notice to your employer to explain what to do for Form I–9 and to show that USCIS has automatically extended your EAD through June 12, 2025, but you are not required to do so. The last day of the automatic EAD extension is June 12, 2025. Before you start work on June 13, 2025, your employer is required by law to reverify your employment authorization on Form I–9. By that time, you must present any document from List A or any document from List C on Form I–9 Lists of Acceptable Documents, or an acceptable List A or List C receipt described in these lists to reverify employment authorization.

Your employer may not specify which List A or List C document you must present and cannot reject an acceptable receipt.

If I have an EAD based on another immigration status, can I obtain a new TPS-based EAD?

Yes, if you are eligible for TPS, you can obtain a new TPS-based EAD, even if you already have an EAD or work authorization based on another immigration status. If you want to obtain a new TPS-based EAD valid through December 12, 2025, you must file Form I–765 and pay the associated fee (unless USCIS grants your fee waiver request).

Can my employer require that I provide any other documentation to complete Form I–9, such as evidence of my status, proof of my Ethiopian citizenship, or a Form I–797C showing that I registered for TPS?

No. When completing Form I–9, employers must accept any documentation you choose to present from the Form I–9 Lists of Acceptable Documents that reasonably appears to be genuine and that relates to you, or an acceptable List A, List B, or List C receipt. Employers may not request other documentation, such as proof of Ethiopian citizenship or proof of registration for TPS when completing Form I–9 for new hires or reverifying the employment authorization of current employees. If you present an EAD that USCIS has automatically extended, employers should accept it as a valid List A document if the EAD reasonably appears to be genuine and to relate to you. Refer to the ''Note to Employees'' section of this **Federal Register** notice for important information about your rights if your employer rejects lawful documentation, requires additional documentation, or otherwise discriminates against you based on your citizenship or immigration status or your national origin.

How do my employer and I complete Form I–9 using my automatically extended EAD for a new job?

When using an automatically extended EAD to complete Form I–9 for a new job before June 13, 2025:

1. For Section 1, you should:

a. Check ''A noncitizen authorized to work until'' and enter June 12, 2025, as the ''expiration date''; and

b. Enter your USCIS number or A-Number where indicated. (Your EAD or other document from DHS will have your USCIS number or A-Number printed on it; the USCIS number is the same as your A-Number without the A prefix.)

2. For Section 2, employers should:

a. Determine whether the EAD is auto-extended by ensuring it is in category A–12 or C–19 and has a ''Card Expires'' date of June 12, 2024;

b. Write in the document title;

c. Enter the issuing authority;

d. Provide the document number; and

e. Write June 12, 2025, as the expiration date.

Before the start of work on June 13, 2025, employers must reverify the

employee's employment authorization on Form I–9.

What updates should my current employer make to Form I–9 if my EAD has been automatically extended?

If you presented a TPS-related EAD that was valid when you first started your job and USCIS has now automatically extended your EAD, your employer may need to re-examine your current EAD if they do not have a copy of the EAD on file. Your employer should determine whether your EAD is automatically extended by ensuring that it contains Category A–12 or C–19 and has a ''Card Expires'' date of June 12, 2024. Your employer may not rely on the country of birth listed on the card to determine whether you are eligible for this extension.

If your employer determines that USCIS has automatically extended your EAD, your employer should update Section 2 of your previously completed Form I–9 as follows:

1. Write EAD EXT and June 12, 2025, as the last day of the automatic extension in the Additional Information field; and

2. Initial and date the correction.

Note: This is not considered a reverification. Employers do not reverify the employee until either the automatic extension has ended, or the employee presents a new document to show continued employment authorization, whichever is sooner. By June 13, 2025, when the employee's automatically extended EAD has expired, employers are required by law to reverify the employee's employment authorization on Form I–9.

If I am an employer enrolled in E-Verify, how do I verify a new employee whose EAD has been automatically extended?

Employers may create a case in E-Verify for a new employee by entering the number from the Document Number field on Form I–9 into the document number field in E-Verify. Employers should enter June 12, 2025, as the expiration date for an EAD that has been extended under this **Federal Register** notice.

If I am an employer enrolled in E-Verify, what do I do when I receive a ''Work Authorization Documents Expiring'' alert for an automatically extended EAD?

E-Verify automated the verification process for TPS-related EADs that are automatically extended. If you have employees who provided a TPS-related EAD when they first started working for you, you will receive a ''Work Authorization Documents Expiring'' case alert when the auto-extension period for this EAD is about to expire. Before this employee starts work on June 13, 2025, you must reverify their employment authorization on Form I–9. Employers may not use E-Verify for reverification.

Note to All Employers

Employers are reminded that the laws requiring proper employment eligibility verification and prohibiting unfair immigration-related employment practices remain in full force. This **Federal Register** notice does not supersede or in any way limit applicable employment verification rules and policy guidance, including those rules setting forth reverification requirements. For general questions about the employment eligibility verification process, employers may call USCIS at 888–464–4218 (TTY 877–875–6028) or email USCIS at *I9Central@uscis.dhs.gov.* USCIS accepts calls and emails in English and many other languages. For questions about avoiding discrimination during the employment eligibility verification process (Form I–9 and E-Verify), employers may call the U.S. Department of Justice, Civil Rights Division, Immigrant and Employee Rights Section (IER) Employer Hotline at 800–255–8155 (TTY 800–237–2515). IER offers language interpretation in many languages. Employers may also email IER at *IER@usdoj.gov* or get more information online at *https://www.justice.gov/ier.*

Note to Employees

For general questions about the employment eligibility verification process, employees may call USCIS at 888–897–7781 (TTY 877–875–6028) or email USCIS at *I-9Central@uscis.dhs.gov.* USCIS accepts calls in English, Spanish and many other languages. Employees or job applicants may also call the U.S. Department of Justice, Civil Rights Division, Immigrant and Employee Rights Section (IER) Worker Hotline at 800–255–7688 (TTY 800–237–2515) for information regarding employment discrimination based on citizenship, immigration status, or national origin, including discrimination related to Form I–9 and E-Verify. The IER Worker Hotline provides language interpretation in many languages.

To comply with the law, employers must accept any document or combination of documents from the Lists of Acceptable Documents if the documentation reasonably appears to be genuine and to relate to the employee, or an acceptable List A, List B, or List C receipt as described in these lists. Employers may not require extra or additional documentation other than what is required to complete Form I–9. Further, employers participating in E-Verify who receive an E-Verify case result of ''Tentative Nonconfirmation'' (mismatch) must promptly inform employees of the mismatch and give these employees an opportunity to resolve the mismatch. A mismatch means that the information entered into E-Verify from Form I–9 differs from records available to DHS.

Employers may not terminate, suspend, delay training, withhold or lower pay, or take any adverse action against an employee because of a mismatch while the case is still pending with E-Verify. A Final Nonconfirmation (FNC) case result occurs if E-Verify cannot confirm an employee's employment eligibility. An employer may terminate employment based on a case result of FNC. Work-authorized employees who receive an FNC may call USCIS for assistance at 888–897–7781 (TTY 877–875–6028). For more information about E-Verify-related discrimination or to report an employer for discrimination in the E-Verify process based on citizenship, immigration status, or national origin, contact IER's Worker Hotline at 800–255–7688 (TTY 800–237–2515). Additional information about proper nondiscriminatory Form I–9 and E-Verify procedures is available on the IER website at *https://www.justice.gov/ier* and the USCIS and E-Verify websites at *https://www.uscis.gov/i-9-central* and *https://www.e-verify.gov.*

Note Regarding Federal, State, and Local Government Agencies (Such as Departments of Motor Vehicles)

For Federal purposes, if you present an automatically extended EAD referenced in this **Federal Register** notice, you do not need to show any other document, such as a Form I–797C, Notice of Action, reflecting receipt of a Form I–765 EAD renewal application or this **Federal Register** notice, to prove that you qualify for this extension. While Federal Government agencies must follow the guidelines laid out by the Federal Government, State and local government agencies establish their own rules and guidelines when granting certain benefits. Each state may have different laws, requirements, and determinations about what documents you need to provide to prove eligibility for certain benefits. Whether you are applying for a Federal, State, or local government benefit, you may need to provide the government agency with documents that show you are a TPS beneficiary or applicant, show you are authorized to work based on TPS or

other status, or that may be used by DHS to determine if you have TPS or another immigration status. Examples of such documents are:

- Your current EAD with a TPS category code of A–12 or C–19, even if your country of birth noted on the EAD does not reflect the TPS-designated country of Ethiopia;
- Your Form I–94, Arrival/Departure Record;
- Your Form I–797, Notice of Action, reflecting approval of your Form I–765; or
- Form I–797 or Form I–797C, Notice of Action, reflecting approval or receipt of a past or current Form I–821, if you received one from USCIS.

Check with the government agency requesting documentation about which document(s) the agency will accept. Some state and local government agencies use SAVE to confirm the current immigration status of applicants for public benefits.

While SAVE can verify that an individual has TPS or a pending TPS application, each agency's procedures govern whether they will accept an unexpired EAD, Form I–797, Form I–797C, or Form I–94. If an agency accepts the type of TPS-related document you present, such as an EAD, the agency should accept your automatically extended EAD, regardless of the country of birth listed on the EAD. It may assist the agency if you:

a. Give the agency a copy of the relevant **Federal Register** notice showing the extension of TPS-related documentation in addition to your recent TPS-related document with your A-number, USCIS number, or Form I–94 number;

b. Explain that SAVE will be able to verify the continuation of your TPS using this information; and

c. Ask the agency to initiate a SAVE query with your information and follow through with additional verification steps, if necessary, to get a final SAVE response verifying your TPS.

You can also ask the agency to look for SAVE notices or contact SAVE if they have any questions about your immigration status or automatic extension of TPS-related documentation. In most cases, SAVE provides an automated electronic response to benefit-granting agencies within seconds, but occasionally verification can be delayed.

You can check the status of your SAVE verification by using CaseCheck at *https://www.uscis.gov/save/save-casecheck.* CaseCheck is a free service that lets you follow the progress of your SAVE verification case using your date of birth and one immigration identifier number (such as your A-number, USCIS number, or Form I–94 number) or Verification Case Number. If an agency has denied your application based solely or in part on a SAVE response, the agency must offer you the opportunity to appeal the decision in accordance with the agency's procedures. If the agency has received and acted on or will act on a SAVE verification and you do not believe the SAVE response is correct, the SAVE website, *https://www.uscis.gov/save/,* has detailed information on how to make corrections or update your immigration record, make an appointment, or submit a written request to correct records.

[FR Doc. 2024–07643 Filed 4–12–24; 8:45 am]

BILLING CODE 9111–97–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–7080–N–18]

30-Day Notice of Proposed Information Collection: Housing Counseling Program—Application for Approval as a Housing Counseling Agency OMB Control No.: 2502–0573

AGENCY: Office of Policy Development and Research, Chief Data Officer, HUD.

ACTION: Notice.

SUMMARY: HUD is seeking approval from the Office of Management and Budget (OMB) for the information collection described below. In accordance with the Paperwork Reduction Act, HUD is requesting comment from all interested parties on the proposed collection of information. The purpose of this notice is to allow for an additional 30 days of public comment.

DATES: *Comments Due Date:* May 15, 2024.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Interested persons are also invited to submit comments regarding this proposal and comments should refer to the proposal by name and/or OMB Control Number and should be sent to: Colette Pollard, Clearance Officer, REE, Department of Housing and Urban Development, 451 7th Street SW, Room 8210, Washington, DC 20410; email *PaperworkReductionActOffice@hud.gov.*

FOR FURTHER INFORMATION CONTACT: Colette Pollard, Reports Management Officer, REE, Department of Housing and Urban Development, 7th Street SW, Room 8210, Washington, DC 20410; email Colette Pollard at *Colette.Pollard@hud.gov* or telephone (202) 402–3400. This is not a toll-free number. HUD welcomes and is prepared to receive calls from individuals who are deaf or hard of hearing, as well as individuals with speech or communication disabilities. To learn more about how to make an accessible telephone call, please visit *https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs.*

Copies of available documents submitted to OMB may be obtained from Ms. Pollard.

SUPPLEMENTARY INFORMATION: This notice informs the public that HUD is seeking approval from OMB for the information collection described in Section A.

The **Federal Register** notice that solicited public comment on the information collection for a period of 60 days was published on December 18, 2023 at 88 FR 87452.

A. Overview of Information Collection

Title of Information Collection: Housing Counseling Program—Application for Approval as a Housing Counseling Agency.

OMB Approval Number: 2502–0573.

OMB Expiration Date: April 30, 2024.

Type of Request: Revision of a currently approved collection.

Form Numbers: Form HUD–9900 and Form HUD–9900a.

Description of the need for the information and proposed use: The Office of Housing Counseling (OHC) is responsible for the administration of the Department's Housing Counseling Program, authorized by Section 106 of the Housing and Urban Development Act of 1968 (12 U.S.C. and 42 U.S.C. 3533(g)). The Housing Counseling Program supports the delivery of a wide variety of housing counseling services to homebuyers, homeowners, low- to moderate-income renters, and the homeless. The primary objective of the program is to educate families and individuals to help them improve their housing situation and meet the responsibilities of tenancy and homeownership, including through budget and financial counseling. Counselors also help borrowers avoid predatory lending practices, such as inflated appraisals, unreasonably high

interest rates, unaffordable repayment terms, and other conditions that can result in a loss of equity, increased debt, default, and possible foreclosure. Counselors may also provide reverse mortgage counseling to senior homeowners who seek to convert equity in their homes to pay for home improvements, medical costs, living expenses or other expenses. Additionally, housing counselors may distribute and be a resource for information concerning Fair Housing and Fair Lending. The Housing Counseling Program is instrumental to the achievement of HUD's mission. The Program's far-reaching effects support numerous departmental programs, including Federal Housing Administration (FHA) single family housing programs.

Respondents: Not-for-profit institutions; Individuals; households; Federal Government; State, Local or Tribal Government.

Estimated Number of Respondents: 973.

Estimated Number of Responses: 973.

Frequency of Response: 1.

Average Hours per Response: 8.

Total Estimated Burden: 7,946 hours.

B. Solicitation of Public Comment

This notice is soliciting comments from members of the public and affected parties concerning the collection of information described in Section A on the following:

(1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) The accuracy of the agency's estimate of the burden of the proposed collection of information;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

(5) ways to minimize the burden of the collection of information on those who are t0 respond, including the use of automated collection techniques or other forms of information technology.

HUD encourages interested parties to submit comments in response to these questions.

C. Authority

Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. Chapter 3507.

Colette Pollard,

Department Reports Management Officer, Office of Policy Development and Research, Chief Data Officer.

[FR Doc. 2024–07870 Filed 4–12–24; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–7093–N–02]

60-Day Notice of Proposed Information Collection; HUD Correspondence Tracking System Correspondence Portal; OMB Control No: 2501–NEW

AGENCY: Office of Administration, HUD.

ACTION: Notice.

SUMMARY: HUD is seeking approval from the Office of Management and Budget (OMB) for the information collection described below. In accordance with the Paperwork Reduction Act, HUD is requesting comment from all interested parties on the proposed collection of information. The purpose of this notice is to allow for 60 days of public comment.

DATES: *Comments Due Date:* June 14, 2024.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal.

Written comments and recommendations for the proposed information collection can be sent within 60 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 60-day Review—Open for Public Comments'' or by using the search function. Interested persons are also invited to submit comments regarding this proposal by name and/or OMB Control Number and should be sent to: Colette Pollard, Reports Management Officer, REE, Department of Housing and Urban Development, 451 7th Street SW, Room 8210, Washington, DC 20410; telephone (202) 402–3577 (this is not a toll-free number) or email: *PaperworkReductionActOffice@hud.gov.*

FOR FURTHER INFORMATION CONTACT: Colette Pollard, Reports Management Officer, REE, Department of Housing and Urban Development, 451 7th Street SW, Washington, DC 20410; email Colette Pollard at *Colette.Pollard@hud.gov* or telephone (202) 402–3400. This is not a toll-free number. HUD welcomes and is prepared to receive calls from individuals who are deaf or hard of hearing, as well as individuals with speech or communication disabilities. To learn more about how to make an accessible telephone call, please visit: *https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs.*

Copies of available documents submitted to OMB may be obtained from Ms. Pollard.

SUPPLEMENTARY INFORMATION: This notice informs the public that HUD is seeking approval from OMB for the information collection described in Section A.

A. Overview of Information Collection

Title of Information Collection: HUD Correspondence Tracking System Correspondence Portal.

OMB Approval Number: 2501–NEW.

Type of Request: Modified collection.

Form Number: N/A.

Description of the need for the information and proposed use: HUD collects information about customers for mission-related use that contact the Agency with questions and/or comments. Respondents have the ability to submit their electronic requests through the Public Access Link. The HUD staff then enters the information into the system to support answering the public question/comment. If the inquiry can be answered immediately, then HUD addresses the request. If the inquiry requires follow-up, then the customer's information is collected for a future response. Minimum data is collected to create an interaction history between the individual and HUD, name, home address, email address, or phone number. HUD accepts electronic submissions from respondents through the Public Access Link, which reduces the burden on the public.

Respondents: Individuals who wish to contact the Agency with questions and/or comments.

Estimated Number of Respondents: 582.

Frequency of Response: 1.

Estimated Number of Responses: 582.

Average Hours per Response: 0.33.

Total Estimated Burdens: 192.06.

Information collection	Number of respondents	Frequency of response	Responses per annum	Burden hour per response	Annual burden hours	Hourly cost per response	Annual cost
Office of the Executive Secretariat	582	1	582	0.33	192.06	$29.76	$5,715.71

B. Solicitation of Public Comment

This notice is soliciting comments from members of the public and affected parties concerning the collection of information described in Section A on the following:

(1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) The accuracy of the agency's estimate of the burden of the proposed collection of information;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond; including through the use of appropriate automated collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

HUD encourages interested parties to submit comment in response to these questions.

C. Authority

Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. chapter 35.

Brittani Groomes,

Associate Executive Secretary for Correspondence.

[FR Doc. 2024–07853 Filed 4–12–24; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. FR–7080–N–21]

30-Day Notice of Proposed Information Collection: HUD Loan Sale Bidder Qualification Statement; OMB Control No.: 2502–0576

AGENCY: Office of Policy Development and Research, Chief Data Officer, HUD.

ACTION: Notice.

SUMMARY: HUD is seeking approval from the Office of Management and Budget (OMB) for the information collection described below. In accordance with the Paperwork Reduction Act, HUD is requesting comment from all interested parties on the proposed collection of information. The purpose of this notice is to allow for an additional 30 days of public comment.

DATES: *Comments Due Date:* May 15, 2024.

ADDRESSES: Interested persons are invited to submit comments regarding this proposal. Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Interested persons are also invited to submit comments regarding this proposal and comments should refer to the proposal by name and/or OMB Control Number and should be sent to: Colette Pollard, Clearance Officer, REE, Department of Housing and Urban Development, 451 7th Street SW, Room 8210, Washington, DC 20410; email *PaperworkReductionActOffice@hud.gov.*

FOR FURTHER INFORMATION CONTACT: Colette Pollard, Reports Management Officer, REE, Department of Housing and Urban Development, 7th Street SW, Room 8210, Washington, DC 20410; email Colette Pollard at *Colette.Pollard@hud.gov* or telephone 202–402–3400. This is not a toll-free number. HUD welcomes and is prepared to receive calls from individuals who are deaf or hard of hearing, as well as individuals with speech or communication disabilities. To learn more about how to make an accessible telephone call, please visit *https://www.fcc.gov/consumers/guides/telecommunications-relay-service-trs.*

Copies of available documents submitted to OMB may be obtained from Ms. Pollard.

SUPPLEMENTARY INFORMATION: This notice informs the public that HUD is seeking approval from OMB for the information collection described in Section A.

The **Federal Register** notice that solicited public comment on the information collection for a period of 60 days was published on December 18, 2023 at 88 FR 87453.

A. Overview of Information Collection

Title of Information Collection: HUD Loan Sale Bidder Qualification Statement.

OMB Approval Number: 2502–0576.

OMB Expiration Date: April 30, 2024.

Type of Request: Revision of a currently approved collection.

Form Number: HUD–90092; HUD–9611; HUD–9612.

Description of the need for the information and proposed use: The Qualification Statement solicits from prospective bidders to the HUD Loan Sales the basic qualifications required for bidding including Purchaser Information (Name of Purchaser, Corporate Entity, Address, Tax ID), Business Type, Net Worth, Equity Size, Prior History with HUD Loans and prior sales participation. By executing the Qualification Statement, the purchaser certifies, represents and warrants to HUD that each of the statements included are true and correct as to the purchaser and thereby qualifies them to bid.

Respondents: Business or other for-profit; not-for-profit institutions; State, local or Tribal government.

Estimated Number of Respondents: 320.

Estimated Number of Responses: 640.

Frequency of Response: On occasion.

Average Hours per Response: 0.25 hours.

Total Estimated Burden: 160 hours.

B. Solicitation of Public Comment

This notice is soliciting comments from members of the public and affected parties concerning the collection of information described in Section A on the following:

(1) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

(2) The accuracy of the agency's estimate of the burden of the proposed collection of information;

(3) Ways to enhance the quality, utility, and clarity of the information to be collected; and

(4) Ways to minimize the burden of the collection of information on those who are to respond; including through the use of appropriate automated collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

(5) ways to minimize the burden of the collection of information on those who are to respond, including the use of automated collection techniques or other forms of information technology.

HUD encourages interested parties to submit comment in response to these questions.

C. Authority

Section 3507 of the Paperwork Reduction Act of 1995, 44 U.S.C. 3507.

Colette Pollard,

Department Reports Management Officer, Office of Policy Development and Research, Chief Data Officer.

[FR Doc. 2024–07865 Filed 4–12–24; 8:45 am]

BILLING CODE 4210–67–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[L14400000 PN0000 HQ350000 212; OMB Control No. 1004–0153]

Agency Information Collection Activities; Conveyance of Federally-Owned Mineral Interests

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of information collection; request for comment.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, the Bureau of Land Management (BLM) proposes to renew an information collection.

DATES: Interested persons are invited to submit comments on or before June 14, 2024.

ADDRESSES: Send your written comments on this information collection request (ICR) by mail to Darrin King, Information Collection Clearance Officer, U.S. Department of the Interior, Bureau of Land Management, Attention PRA Office, 440 W 200 S #500, Salt Lake City, UT 84101; or by email to *BLM_HQ_PRA_Comments@blm.gov.* Please reference Office of Management and Budget (OMB) Control Number 1004–0153 in the subject line of your comments. Please note that the electronic submission of comments is recommended.

FOR FURTHER INFORMATION CONTACT: To request additional information about this ICR, contact Grace M. Wagstaff by email at *gwagstaff@blm.gov,* or by telephone at (279) 202–4627. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States. The ICR may also be viewed at *http://www.reginfo.gov/public/do/PRAMain.*

SUPPLEMENTARY INFORMATION: In accordance with the Paperwork Reduction Act of 1995 (PRA, 44 U.S.C. 3501 *et seq.*) and 5 CFR 1320.8(d)(1), all information collections require approval under the PRA. The BLM may not conduct or sponsor a collection of information and a response to a request for information is not required unless it displays a current valid OMB control number.

As part of our continuing effort to reduce paperwork and respondent burdens, we invite the public and other Federal agencies to comment on new, proposed, revised and continuing collections of information. This helps the BLM assess impacts of its information collection requirements and minimize the public's reporting burden. It also helps the public understand BLM information collection requirements and ensure requested data are provided in the desired format.

The BLM is especially interested in public comment addressing the following:

(1) whether collection of information is necessary for the proper performance of the functions of the agency, including if the information will have practical utility;

(2) determination of the accuracy of the BLM's estimate of the burden for collection of information, including validity of methodology and assumptions used;

(3) methods to enhance the quality, utility, and clarity of information to be collected; and

(4) how the agency can minimize the burden of information collection on those who respond, including use of appropriate automated, electronic, mechanical or other technological collection techniques or other forms of information technology.

Comments submitted in response to this notice are a matter of public record. The BLM will include or summarize each comment in its request to OMB to approve this ICR. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Abstract: Section 209(b) of the Federal Land Policy and Management Act (43 U.S.C. 1719) authorizes the Secretary of the Interior to convey Federally-owned mineral interests to non-Federal owners of the surface estate. The respondents in this information collection are non-Federal owners of surface estates who apply for underlying Federally-owned mineral interests. This information collection enables the Bureau of Land Management (BLM) to determine if the applicants are eligible to receive title to the Federally-owned mineral interests beneath their lands. OMB's approval for the information collections approved under OMB control number 1004–0153 is scheduled to expire on December 31, 2024. This request is for OMB to renewal this OMB control number for an additional three (3) years.

Title of Collection: Conveyance of Federally-Owned Mineral Interests (43 CFR part 2720).

OMB Control Number: 1004–0153.

Form Number: None.

Type of Review: Extension of a currently approved collection.

Respondents/Affected Public: Owners of surface estates (*i.e.,* individuals, businesses, or state, local, or tribal governments) that want to obtain underlying Federally-owned mineral estates.

Total Estimated Number of Annual Respondents: 5.

Total Estimated Number of Annual Responses: 5.

Estimated Completion Time per Response: 1 hour.

Total Estimated Number of Annual Burden Hours: 5.

Respondent's Obligation: Required to obtain or retain a benefit.

Frequency of Collection: On occasion.

Total Estimated Annual Nonhour Burden Cost: $250.

An agency may not conduct or sponsor and, notwithstanding any other provision of law, a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

The authority for this action is the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

Darrin A. King,

Information Collection Clearance Officer.

[FR Doc. 2024–07842 Filed 4–12–24; 8:45 am]

BILLING CODE 4310–84–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

DEPARTMENT OF AGRICULTURE

Forest Service

[BLM_FRN_MO4500176455]

Notice of Intent To Prepare an Environmental Impact Statement for the Proposed Skyline Mine Little Eccles Lease by Application in Emery County and Flat Canyon Lease Modification in Sanpete County, Utah

AGENCY: Bureau of Land Management, Interior, USDA Forest Service, Agriculture.

ACTION: Notice of intent.

SUMMARY: In compliance with the National Environmental Policy Act of 1969, as amended (NEPA), the Federal Land Policy and Management Act of 1976, as amended (FLPMA), the National Forest Management Act of 1976 (NFMA), and the Mineral Leasing Act of 1920, as amended (MLA), the Bureau of Land Management (BLM) Price Field Office, and U.S. Department of Agriculture Forest Service (USDA Forest Service) Manti-La Sal National Forest, as co-lead agencies, intend to prepare an Environmental Impact Statement (EIS) in response to a Lease by Application (LBA) for the Little Eccles Federal Coal Lease Tract (UTU–92226) of 120 acres and a Lease Modification Application (LMA) to add 640 acres to the Flat Canyon Lease Tract (UTU–77114). This notice is announcing the beginning of the scoping process to solicit public comments and identify issues. The EIS will evaluate potential impacts of leasing and underground mining of Federal coal reserves contained in both lease tracts.

DATES: This notice initiates the public-scoping process for the EIS. The lead agencies request that the public submit comments concerning the scope of the analysis, potential alternatives, and identification of relevant information, and studies by May 30, 2024. To afford the lead agencies the opportunity to consider comments in the Draft EIS, please ensure your comments are received prior to the close of the 45-day scoping period or 15 days after the last public meeting, whichever is later.

ADDRESSES: You may submit comments related to the Skyline Mine Little Eccles LBA and Flat Canyon LMA by the following methods:

- *Website: https://eplanning.blm.gov/eplanning-ui/project/2015277/510*
- *Mail:* Bureau of Land Management, Skyline Mine Little Eccles Lease by Application and Flat Canyon Lease Modification, 125 South 600 West, Price, Utah 84501

Documents pertinent to this proposal may be examined online at *https://eplanning.blm.gov/eplanning-ui/project/2015277/510, https://www.fs.usda.gov/sopa/forest-level.php?110410,* and at the BLM Price Field Office: 125 South 600 West, Price, Utah 84501.

FOR FURTHER INFORMATION CONTACT: Erika Tobin, BLM Green River District Mining Engineer, telephone 435–636–3605, address 125 South 600 West, Price, Utah 84501. Contact Ms. Tobin to have your name added to our mailing list. Individuals in the United States who are deaf, deafblind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services for contacting Ms. Tobin. Individuals outside the United States should use the relay services offered within their country to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: Canyon Fuel Company, LLC (hereafter ''the Applicant''), submitted two coal lease applications to the BLM Price Field Office on June 10, 2019. One is an LBA for the Little Eccles Federal Coal Lease Tract of 120 acres in T. 14 S., R. 6 E., SLM, Emery County, Utah sec. 10: SE¼. The other is an LMA for the existing Flat Canyon Lease Tract to add 640 acres in T. 14 S., R. 5 E., SLM, Sanpete County, Utah sec. 9. Both tracts are adjacent to the existing Skyline Mine which has been in operation since 1981. The surface estate of the lease tracts is administered by the USDA Forest Service Manti-La Sal National Forest. The mineral estate (coal) is administered by the BLM Price Field Office. The BLM and USDA Forest Service, as Federal defendants in *WildEarth Guardians* v. *Haaland* (2:16–cv–00168) (D. Utah), have a responsibility under the Settlement Agreement filed March 8, 2023, to prepare an EIS and issue a decision to lease or to forgo leasing of the coal reserves in the Little Eccles Federal Coal Lease Tract and to modify or forgo lease modification of the Flat Canyon Federal Coal Lease Tract.

Purpose and Need for the Proposed Action

The purpose of the BLM and USDA Forest Service actions is to respond to: (1) the Applicant's LBA to competitively lease up to 120 acres and approximately 2.2 million tons of recoverable coal contained in the Little Eccles Federal Coal Lease Tract and (2) the Applicant's LMA for the existing Flat Canyon Federal Coal Lease Tract to increase the tract acreage by up to 640 acres and approximately 8.6 million tons of recoverable coal.

The need for the BLM action is established by the MLA sec. 2 and 3 (30 U.S.C. 201 and 203) and its implementing regulations (43 CFR 3432 and 3425), as amended by the Federal Coal Leasing Amendments Act of 1976, and the FLPMA sec. 102. (43 U.S.C. 1701).

The need for the USDA Forest Service action is to respond to requests for consent to coal leasing pursuant to the MLA, as amended.

Preliminary Proposed Action and Alternatives

Under the No Action alternative, the BLM would deny the LBA to lease the Little Eccles Federal Coal Lease Tract and LMA to modify the existing Flat Canyon Lease Tract. Under this alternative, none of the estimated 10.8 million tons of Federal coal would be leased and extraction of Federal coal within the lease tracts would not occur. There are an estimated 13.6 million tons of privately-owned coal contained in tracts abutting the Federal lease tracts. Under the No Action Alternative, it is reasonably foreseeable that approximately 8 million tons of privately-owned coal not subject to Federal decisions would be mined. However, the remaining 5.6 million tons of privately-owned coal would not be feasible to extract.

Under the Proposed Action alternative, the BLM would offer for competitive leasing the Little Eccles Federal Coal Lease Tract (UTU–92226; 120 acres) containing an estimated 2.2 million tons of recoverable coal and authorize the Applicant's requested non-competitive lease modification to add 640 acres and an estimated 8.6 million tons of recoverable coal to the Flat Canyon Lease Tract (UTU–77114). The USDA Forest Service, Manti-La Sal National Forest would consent to leasing both tracts of Federal coal. Leasing the Federal coal contained in the Little Eccles Federal Coal Lease Tract and the modified Flat Canyon Lease Tract would allow the Applicant to recover the full quantity of the estimated 13.6 million tons of privately-owned coal abutting the Federal lease tracts.

Under the Proposed Action the Federal coal leases would be subject to standard lease terms and conditions. In addition, as part of the NEPA process

the BLM and USDA Forest Service may identify stipulations to address impacts to non-mineral interests and these stipulations may be included in the applicable decision(s) and attached to the applicable lease(s).

Other alternatives to be considered in the EIS are expected to be variations of tract configuration based on resource issues identified through the scoping process. The lead agencies welcome comments on all preliminary alternatives as well as suggestions for additional alternatives.

Summary of Expected Impacts

The effects of leasing and anticipated development under the Proposed Action are expected to include mining-induced subsidence and seismicity and hydrological effects (surface water and groundwater). Greenhouse gas emissions and air pollutant emissions are also expected to occur, including indirect effects associated with transportation and combustion of mined coal.

Anticipated Permits and Authorizations

The Applicant would need BLM approval of the LBA and/or LMA. In addition, should the LBA be approved, the Applicant would need a Resource Recovery Protection Plan for the Little Eccles Lease Tract prepared by the BLM which would establish the terms to achieve Maximum Economic Recovery (MER) as required by 43 CFR 3422.1. The Applicant would also need a mining permit and/or permit modification from Utah Division of Oil, Gas and Mining (UDOGM). Finally, a mining plan decision document prepared by the Office of Surface Mining Reclamation and Enforcement (OSMRE) would need approval from the Assistant Secretary for Land and Minerals Management before the Applicant could mine the LBA and/or LMA.

Schedule for the Decision-Making Process

The lead agencies will provide additional opportunities for public participation consistent with the NEPA process, including a 45-day comment period on the Draft EIS. Comment meeting(s) on the Draft EIS will be held concurrently with the MER and Fair Market Value hearing. The Draft EIS is anticipated to be available for public review in the fall of 2024, and the Final EIS is anticipated to be released in the spring of 2025 with Records of Decision later in spring of 2025.

Public Scoping Process

This notice of intent initiates the scoping period. The lead agencies will be holding one virtual scoping meeting and two in-person scoping meetings. The specific dates and locations of the scoping meeting will be announced in advance through the BLM ePlanning page (see **ADDRESSES**) and other lead agency websites (see **ADDRESSES**).

Lead and Cooperating Agencies

The BLM and USDA Forest Service are co-lead agencies. Based on special expertise and jurisdiction by law, OSMRE and the UDOGM are cooperating agencies. Based on special expertise on environmental impacts, the Environmental Protection Agency (EPA) is a cooperating agency.

Responsible Officials

The responsible official for the BLM is the BLM Utah State Director. The scope of the State Director's decision is limited to the LBA and the LMA. The responsible official for the USDA Forest Service is the Manti-La Sal National Forest Supervisor. The scope of the Forest Supervisor's decision is limited to consenting to lease.

Nature of Decision To Be Made

The BLM will decide to lease or to forgo leasing of the coal reserves in the Little Eccles Federal Coal Lease Tract and Flat Canyon Federal Coal Lease Tract. The USDA Forest Service will decide to consent to or deny consent to the leasing of the subject Federal coal tracts.

Forest Service Regulations

The decision that the USDA Forest Service will make is subject to a pre-decisional administrative review process, also known as an objection process (36 CFR 218, subparts A and B). The objection process provides an opportunity for members of the public who have participated in the planning process for the action to have any unresolved concerns reviewed by the USDA Forest Service prior to a final decision by the responsible official. It is important that reviewers provide their comments at such times and in such manner that they are useful to the agency's preparation of the final EIS; therefore, comments should be provided prior to the close of the comment period and should clearly articulate the reviewer's concerns and contentions. Commenting during scoping and any other designated opportunity to comment provided by the responsible official as prescribed by the applicable regulations will also govern eligibility to object once the final EIS and draft Record of Decision has been published. Comments received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Comments submitted anonymously will be accepted and considered; however, they will not be used to establish eligibility for the objection process.

Objections will be accepted only from those who have previously submitted specific written comments regarding the proposed project during scoping or other designated opportunity for public comment in accordance with § 218.5(a). Issues raised in objections must be based on previously submitted timely, specific written comments regarding the proposed project unless based on new information arising after designated opportunities.

Additional Information

The lead agencies will identify, analyze, and consider mitigation to address the reasonably foreseeable impacts to resources from the proposed action and all analyzed reasonable alternatives and, in accordance with 40 CFR 1502.14(e), include appropriate mitigation measures not already included in the proposed action or alternatives. Mitigation may include avoidance, minimization, rectification, reduction or elimination over time, and compensation; and may be considered at multiple scales, including the landscape scale.

The lead agencies will utilize and coordinate the NEPA process to help support compliance with applicable procedural requirements under the Endangered Species Act (16 U.S.C. 1536) and section 106 of the National Historic Preservation Act (54 U.S.C. 306108) as provided in 36 CFR 800.2(d)(3), including public involvement requirements of section 106. The information about historic and cultural resources and threatened and endangered species within the area potentially affected by the proposed action will assist the lead agencies in identifying and evaluating impacts to such resources.

The lead agencies will consult with Indian Tribal Nations on a government-to-government basis in accordance with Executive Order 13175, Forest Service Handbook 1509.13, Forest Service Manual 1500, FS–1211 Strengthening Tribal Consultations and Nation-to-Nation Relationships. Presidential Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships, January 26, 2021, BLM Manual Section 1780, and other Departmental policies. Tribal concerns,

including impacts on Indian trust assets and potential impacts to cultural resources, will be given due consideration. Federal, State, and local agencies, along with Indian Tribal Nations and other stakeholders that may be interested in or affected by the action the lead agencies are evaluating, are invited to participate in the scoping process and, if eligible, may request or be requested by the lead agencies to participate in the development of the environmental analysis as a cooperating agency.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

(Authority: 40 CFR 1501.9)

Gregory Sheehan,

BLM Utah State Director.

Barbara Van Alstine,

Acting Forest Supervisor, USDA Forest Service, Manti-La Sal National Forest.

[FR Doc. 2024–07846 Filed 4–12–24; 8:45 am]

BILLING CODE 4331–25–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[BLM_OR_FRN_MO4500178550]

Public Meeting for the John Day-Snake Resource Advisory Council, Oregon

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice of public meetings.

SUMMARY: In accordance with the Federal Land Policy and Management Act of 1976 and the Federal Advisory Committee Act of 1972, the U.S. Department of the Interior, Bureau of Land Management's (BLM) John Day-Snake Resource Advisory Council (RAC) will meet as follows.

DATES: The John Day-Snake Resource Advisory Council will meet Thursday, June 6 from 1 p.m. to 4:30 p.m. Pacific Time (PT) and participate in a field tour Friday, June 7, 2024, to the National Historic Oregon Trail Interpretive Center from 9 a.m. to noon PT. The meeting will be held, and the field tour will commence and conclude, at the BLM Baker Field Office, 3100 H St., Baker City, OR 97814. A virtual participation option for the June 6 meeting will also be available.

Thirty-minute public comment periods will be offered at 3 p.m. PT June 6; and at 9:05 a.m. PT June 7.

ADDRESSES: The final agenda and contact information regarding Zoom participation details will be published on the RAC's web page at least 10 days in advance at *https://www.blm.gov/get-involved/resource-advisory-council/near-you/oregon-washington/john-day-rac.*

Comments to the RAC can be mailed to: BLM Vale District, Attn. Shane DeForest, 100 Oregon St., Vale, OR 97918.

FOR FURTHER INFORMATION CONTACT: Larisa Bogardus, Public Affairs Specialist, 3100 H. St., Baker City, OR 97814; telephone: 541–523–1407; email: *lbogardus@blm.gov.* Individuals in the United States who are deaf, blind, hard of hearing, or have a speech disability may dial 711 (TTY, TDD, or TeleBraille) to access telecommunications relay services. Individuals outside the United States should use the relay services offered within their countries to make international calls to the point-of-contact in the United States.

SUPPLEMENTARY INFORMATION: The 15-member RAC was chartered, and members appointed, by the Secretary of the Interior. Its diverse perspectives are represented in commodity, non-commodity, and local area interests. The RAC provides advice to BLM and, as needed, to U.S. Forest Service resource managers regarding management plans and proposed resource actions on public land in the John Day-Snake area. The meeting is open to the public in its entirety. Information to be distributed to the RAC must be provided to its members prior to the start of each meeting.

June 6 agenda items include management of energy and minerals, timber, rangeland and grazing, commercial and dispersed recreation, wildland fire and fuels, wild horses and burro management, and agency updates from the Vale and Prineville BLM Districts and the Wallowa-Whitman, Umatilla, Malheur, Ochoco, and Deschutes National Forests; and any other business that may reasonably come before the RAC. The Designated Federal Officer will attend the meeting, take minutes, and publish the minutes on the RAC's web page at *https://www.blm.gov/get-involved/resource-advisory-council/near-you/oregon-washington/john-day-rac.* Members of the public are welcome to participate in the June 7 field tour to the National Historic Oregon Trail Interpretive Center but must provide their own transportation and meals.

For sign language interpreter services, assistive listening devices, or other reasonable accommodations, please contact (**FOR FURTHER INFORMATION CONTACT**) 7 business days before the meeting to ensure there is sufficient time to process the request. The Department of the Interior manages accommodation requests on a case-by-case basis.

The public may send written comments to the RAC in response to material presented (see **ADDRESSES**).

Before including your address, phone number, email address, or other personal identifying information in your comments, please be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee we will be able to do so.

(Authority: 43 CFR 1784.4–2)

Shane DeForest,

Vale District Manager.

[FR Doc. 2024–07909 Filed 4–12–24; 8:45 am]

BILLING CODE 4331–24–P

DEPARTMENT OF THE INTERIOR

National Park Service

[NPS–WASO–NRNHL–DTS#–37778; PPWOCRADI0, PCU00RP14.R50000]

National Register of Historic Places; Notification of Pending Nominations and Related Actions

AGENCY: National Park Service, Interior.

ACTION: Notice.

SUMMARY: The National Park Service is soliciting electronic comments on the significance of properties nominated before April 6, 2024, for listing or related actions in the National Register of Historic Places.

DATES: Comments should be submitted electronically by April 30, 2024.

ADDRESSES: Comments are encouraged to be submitted electronically to *National_Register_Submissions@nps.gov* with the subject line ''Public Comment on <property or proposed district name, (County) State>.'' If you have no access to email, you may send them via U.S. Postal Service and all other carriers to the National Register of Historic Places, National Park Service, 1849 C Street NW, MS 7228, Washington, DC 20240.

FOR FURTHER INFORMATION CONTACT: Sherry A. Frear, Chief, National Register of Historic Places/National Historic Landmarks Program, 1849 C Street NW, MS 7228, Washington, DC 20240, *sherry_frear@nps.gov,* 202–913–3763.

SUPPLEMENTARY INFORMATION: The properties listed in this notice are being considered for listing or related actions in the National Register of Historic Places. Nominations for their consideration were received by the National Park Service before April 6, 2024. Pursuant to section 60.13 of 36 CFR part 60, comments are being accepted concerning the significance of the nominated properties under the National Register criteria for evaluation.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Nominations submitted by State or Tribal Historic Preservation Officers

KEY: State, County, Property Name, Multiple Name (if applicable), Address/Boundary, City, Vicinity, Reference Number.

ARKANSAS

Columbia County

Magnesia Springs Campground, Logoly State Park, Magnolia, SG100010314

Craighead County

Arkansas State University, 2405 Aggie Road, Jonesboro, SG100010315

Faulkner County

Centerville United Methodist Church, 271 McNew Cemetery Road, Greenbrier, SG100010313

Garland County

Velda Rose Tower Motor Hotel, 218 Park A venue, Hot Springs, SG100010312

Jefferson County

Island of Hope Chapel, 2400 State Farm Road, Tucker, SG100010308

Lincoln County

Cummins Prison Chapel, 2540 Highway 388, Grady, SG100010309

Madison County

Wharton Creek Roadside Park, South side of Arkansas Highway 74. approximately 600 feet east of Madison County Road 150, Wharton, SG100010310

Pulaski County

Capitol-Main Historic District (Boundary Increase), 609 and 6 I 5 Main Street, Little Rock, BC100010306

Asher Avenue Overpass, Asher A venue between Appian way Street and South Thayer Street, Little Rock, SG100010307

Red Carpet Inn, 2020 Vance Street, Little Rock, SG100010311

KANSAS

Chase County

Matfield Green High School Gymnasium, (Public Schools of Kansas MPS), 408 Bocook Street, Matfield Green, MP100010290

Crawford County

Carver Social League, 1007 South Elm Street, Pittsburg, SG100010297

Jackson County

Hotel Josephine, 501 Ohio Avenue, Holton, SG100010299

MASSACHUSETTS

Bristol County

Home for Aged People, 1168 Highland Avenue, Fall River, SG100010281

Suffolk County

Columbus Avenue and Bragdon Street Historic District, Roughly bounded by Dimock Street to the north, Amory Street to the west, and West Walnut Park to the south, Boston, SG100010279

Worcester County

Clinton Wire Cloth Company Historic District, 55–104 Sterling Street; 10, 19, and 89 Parker Street, Clinton, SG100010280

Eastwood Cemetery, Old Common-Wilder Road, Lancaster, SG100010282

Old Common Burial Ground, Four Corners-Old Common Road, Lancaster, SG100010283

MICHIGAN

Berrien County

Oak Ridge Cemetery, 818 Terre Coupe Road, Buchanan, SG100010296

MISSISSIPPI

Hinds County

Leonard Court Historic District, Leonard and Botnick Courts, between Farish and Mill Streets, Jackson, SG100010319

NEW HAMPSHIRE

Hillsborough County

Mont Vernon Town Hall, 1 South Main Street, Mont Vernon, SG100010318

PENNSYLVANIA

Mifflin County

Juniata Terrace Historic District, Bound by Delaware Ave., the store on Rt. 103, the school & playgrounds continuing west along Hudson Avenue and Community Avenue, south along 4th St., east to the garages on Delaware Avenue, Borough of Juniata Terrace, SG100010291

TENNESSEE

Carroll County

Webb Public School, 938 Walnut Avenue West, McKenzie, SG100010300

Wilson County

Cedar Heights Farmhouse, 704 Taylor Lane, Mt. Juliet, SG100010336

WEST VIRGINIA

Logan County

Cap Hatfield Gravesite, Overlooking 81, Knights Landing Road, Stirrat, SG100010289

WISCONSIN

Door County

Soper, Dr. Joseph and Olivia, House, 23 North 5th Avenue, Sturgeon Bay, SG100010301

An owner objection received for the following resource(s):

KENTUCKY

Jefferson County

John G. Epping Bottling Works, 702, 705, 708, 712, 718, 725 Logan Street, Louisville, SG100010288

MASSACHUSETTS

Bristol County

Wyoming Mills, (Fall River MRA), 110 Chace St., Fall River, 83004613

A request for removal has been made for the following resource(s):

ARKANSAS

Crawford County

Mulberry River Bridge, (Historic Bridges of Arkansas MPS), Cty Rd. 67, Pleasant Hill vicinity, OT06001272

An additional documentation has been received for the following resource(s):

TENNESSEE

Blount County

Fisher, A. J., House (Additional Documentation), (Blount County MPS), 5311 Dalton Lane, Walland, AD89000877

Davidson County

St. Mary's Catholic Church (Additional Documentation), 330 5th Ave., N, Nashville, AD70000609

Two Rivers (Additional Documentation), 3130 McGavock Pike, Nashville, AD72001238

Hume-Fogg High School (Additional Documentation), 700 Broadway, Nashville, AD74001909

Newsom's Mill (Additional Documentation), 8729 Newsom Station Road, Nashville vicinity, AD76001771

Loudon County

Mason Place (Additional Documentation), 600 Commerce St., Loudon, AD89002029

Maury County

Elm Springs (Additional Documentation), 2357 Park Plus Drive, Columbia vicinity, AD86000402

Rutherford County

Marymont (Additional Documentation), 1126 Rucker Lane, Murfreesboro vicinity, AD73001824

Sullivan County

Clinchfield Railroad Station (Additional Documentation), 101 E Main St., Kingsport, AD73001842

Old Kingsport Presbyterian Church (Additional Documentation), 2049 Greenway Street, Kingsport, AD73001845

Williamson County

Bank of Nolensville (Additional Documentation), (Williamson County MRA), 7287 Nolensville Road, Nolensville, AD88000287

Forest Hills School (Additional Documentation), (Williamson County MRA), Approximately 4064 Carters Creek Pike, Franklin vicinity, AD88000290

Wilson County

Cloyd, John, House (Additional Documentation), Approximately 13978 Lebanon Road, Mount Juliet vicinity, AD74001931

Nomination(s) submitted by Federal Preservation Officers:

TERRITORIAL WATERS

Gulf of Mexico

GREEN LANTERN Shipwreck, (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010322

SS NEW YORK (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010323

MICA (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010324

EWING BANK (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010329

Gulf of Mexico Shipwreck 15563, (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010330

VIOSCA KNOLL (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010325

MARDI GRAS (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010326

Gulf of Mexico Shipwreck 15373, (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010327

Gulf of Mexico Shipwreck 15377, (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010328

MONTERREY A (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010331

MONTERREY B (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010332

Monterrey C (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010333

VERNON BASIN 2109 (Shipwreck), (Nineteenth Century Shipwrecks of the Gulf of Mexico), Address Restricted, Gulf of Mexico, MP100010334

Authority: Section 60.13 of 36 CFR part 60.

Paul R. Lusignan,

Acting Chief, National Register of Historic Places/National Historic Landmarks Program.

[FR Doc. 2024–07852 Filed 4–12–24; 8:45 am]

BILLING CODE 4312–52–P

INTERNATIONAL TRADE COMMISSION

[Investigation Nos. 731–TA–873–875, 878–880, and 882 (Fourth Review)]

Steel Concrete Reinforcing Bar (Rebar) From Belarus, China, Indonesia, Latvia, Moldova, Poland, and Ukraine; Scheduling of a Full Five-Year Reviews

AGENCY: United States International Trade Commission.

ACTION: Notice.

SUMMARY: The Commission hereby gives notice of the scheduling of a full reviews pursuant to the Tariff Act of 1930 (''the Act'') to determine whether revocation of the antidumping duty orders countervailing duty orders on steel concrete reinforcing bar (rebar) from Belarus, China, Indonesia, Latvia, Moldova, Poland, and Ukraine would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. The Commission has determined to exercise its authority to extend the review period by up to 90 days.

DATES: April 9, 2024.

FOR FURTHER INFORMATION CONTACT: Nitin Joshi (202-(202) 708–1669), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*https://www.usitc.gov*). The public record for this review may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov.*

SUPPLEMENTARY INFORMATION:

Background.—On February 5, 2024, the Commission determined that responses to its notice of institution of the subject five-year reviews were such that a full reviews should proceed (89 FR 13089, February 21, 2024); accordingly, full reviews is being scheduled pursuant to section 751(c)(5) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(5)). A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements are available from the Office of the Secretary and at the Commission's website.

Participation in the review and public service list.—Persons, including industrial users of the subject merchandise and, if the merchandise is sold at the retail level, representative consumer organizations, wishing to participate in this review as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, by 45 days after publication of this notice. A party that filed a notice of appearance following publication of the Commission's notice of institution of these reviews need not file an additional notice of appearance. The Secretary will maintain a public service list containing the names and addresses of all persons, or their representatives, who are parties to the review.

For further information concerning the conduct of these reviews and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A and B (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207).

Please note the Secretary's Office will accept only electronic filings during this time. Filings must be made through the Commission's Electronic Document Information System (EDIS, *https://edis.usitc.gov.*) No in-person paper-based filings or paper copies of any electronic filings will be accepted until further notice.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these reviews available to authorized applicants under the APO issued in the review, provided that the application is made by 45 days after publication of this notice. Authorized applicants must represent interested parties, as defined by 19 U.S.C. 1677(9), who are parties to the review. A party

granted access to BPI following publication of the Commission's notice of institution of these reviews need not reapply for such access. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report.—The prehearing staff report in these reviews will be placed in the nonpublic record on September 19, 2024, and a public version will be issued thereafter, pursuant to section 207.64 of the Commission's rules.

Hearing.—The Commission will hold an in-person hearing in connection with these reviews beginning at 9:30 a.m. on Thursday, October 3, 2024. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before 5:15 p.m. on Friday, September 27, 2024. Any requests to appear as a witness via videoconference must be included with your request to appear. Requests to appear via videoconference must include a statement explaining why the witness cannot appear in person; the Chairman, or other person designated to conduct the review, may in their discretion for good cause shown, grant such a request. Requests to appear as remote witness due to illness or a positive COVID–19 test result may be submitted by 3 p.m. the business day prior to the hearing. Further information about participation in the hearing will be posted on the Commission's website at *https://www.usitc.gov/calendarpad/calendar.html.*

A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference, if deemed necessary, to be held at 9:30 a.m. on Tuesday, October 1, 2024. Parties shall file and serve written testimony and presentation slides in connection with their presentation at the hearing by no later than 4:00 p.m. on October 2, 2024. Oral testimony and written materials to be submitted at the public hearing are governed by sections 201.6(b)(2), 201.13(f), and 207.24 of the Commission's rules. Parties must submit any request to present a portion of their hearing testimony *in camera* no later than 7 business days prior to the date of the hearing.

Written submissions.—Each party to the review may submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of section 207.65 of the Commission's rules; the deadline for filing is 5:15 p.m. on September 26, 2024. Parties shall also file written testimony in connection with their presentation at the hearing, and posthearing briefs, which must conform with the provisions of section 207.67 of the Commission's rules. The deadline for filing posthearing briefs is 5:15 p.m. on October 10, 2024. In addition, any person who has not entered an appearance as a party to the reviews may submit a written statement of information pertinent to the subject of the review on or before 5:15 p.m. on October 10, 2024. On November 7, 2024, the Commission will make available to parties all information on which they have not had an opportunity to comment. Parties may submit final comments on this information on or before 5:15 p.m. on November 12, 2024, but such final comments must not contain new factual information and must otherwise comply with section 207.68 of the Commission's rules. All written submissions must conform with the provisions of section 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's *Handbook on Filing Procedures,* available on the Commission's website at *https://www.usitc.gov/documents/handbook_on_filing_procedures.pdf,* elaborates upon the Commission's procedures with respect to filings.

Additional written submissions to the Commission, including requests pursuant to section 201.12 of the Commission's rules, shall not be accepted unless good cause is shown for accepting such submissions, or unless the submission is pursuant to a specific request by a Commissioner or Commission staff.

In accordance with sections 201.16(c) and 207.3 of the Commission's rules, each document filed by a party to the review must be served on all other parties to these reviews (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

The Commission has determined that these reviews are extraordinarily complicated and therefore has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C.1675(c)(5)(B).

Authority: These reviews is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: April 10, 2024.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2024–07917 Filed 4–12–24; 8:45 am]

BILLING CODE 7020–02–P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 337–TA–1265 (Rescission II)]

Certain Fitness Devices, Streaming Components Thereof, and Systems Containing Same Institution of Rescission Proceeding; Issuance of Order Rescinding Remedial Orders as to Certain Respondents; Termination of Rescission Proceeding

AGENCY: U.S. International Trade Commission.

ACTION: Notice.

SUMMARY: Notice is hereby given that the U.S. International Trade Commission (''Commission'') has determined to institute a rescission proceeding, issue an order rescinding the remedial orders directed to iFIT Inc., f/k/a ICON Health & Fitness, Inc. of Logan, Utah; FreeMotion Fitness, Inc. of Logan, Utah; and NordicTrack Inc. of Logan, Utah (together with iFIT Inc. and FreeMotion Fitness, Inc., ''iFit''), and then terminate the rescission proceeding.

FOR FURTHER INFORMATION CONTACT: Ronald A. Traud, Esq., Office of the General Counsel, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436, telephone (202) 205–3427. Copies of non-confidential documents filed in connection with this investigation may be viewed on the Commission's electronic docket (EDIS) at *https://edis.usitc.gov.* For help accessing EDIS, please email *EDIS3Help@usitc.gov.* General information concerning the Commission may also be obtained by accessing its internet server at *https://www.usitc.gov.* Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205–1810.

SUPPLEMENTARY INFORMATION: On May 19, 2021, the Commission instituted the underlying investigation based on a complaint filed on behalf of complainants DISH DBS Corporation of Englewood, Colorado; DISH Technologies L.L.C. of Englewood, Colorado; and Sling TV L.L.C. of Englewood, Colorado (collectively, ''DISH''). 86 FR 27106, 27106–07 (May 19, 2021). The complaint alleged

violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. 1337, in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain fitness devices, streaming components thereof, and systems containing the same by reason of infringement of certain claims of U.S. Patent Nos. 9,407,564 (''the '564 patent''); 10,469,554 (''the '554 patent''); 10,469,555 (''the '555 patent''); 10,757,156 (''the '156 patent''); and 10,951,680 (''the '680 patent''). *Id.* The complaint further alleged that a domestic industry exists. *Id.* The Commission's notice of investigation named as respondents iFit; Peloton Interactive, Inc. of New York, New York (''Peloton''); lululemon athletica inc. of Vancouver, Canada; and Curiouser Products Inc. d/b/a MIRROR of New York, New York (together with lululemon athletica inc., ''MIRROR,'' and together with the other respondents, ''Respondents''). *Id.;* Order No. 14 (Nov. 4, 2021), *unreviewed by* Comm'n Notice (Dec. 6, 2021), 86 FR 70532 (Dec. 10, 2021). The Office of Unfair Import Investigations (''OUII'') participated in the investigation. 86 FR at 27106–07.

On March 8, 2023, the Commission issued its final determination, finding respondents Peloton and iFit in violation of section 337 as to the asserted claims of the '156, '554, and '555 patents, but not as to the asserted claims of the '564 patent. *See* 88 FR 15736 (Mar. 14, 2023). The investigation had terminated as to the asserted claims of the '680 patent prior to the issuance of the final initial determination, Order No. 21 (Mar. 3, 2022), *unreviewed by* Comm'n Notice (Mar. 23, 2022), and the final determination granted an unopposed motion to terminate as to MIRROR, *see* 88 FR at 15736. As a remedy, the Commission issued a limited exclusion order (''LEO'') and cease and desist orders (''CDOs'') directed to Peloton and iFit. *Id.*

On May 5, 2023, the Commission modified the remedial orders in certain respects, *see* 88 FR 30158 (May 10, 2023). On June 1, 2023, the Commission rescinded the remedial orders directed to Peloton. *See* 88 FR 37274 (June 7, 2023). Thus, the remaining orders in this investigation are only directed to iFit.

On March 8, 2024, DISH filed a petition requesting that the Commission rescind the remedial orders issued against iFit based on a settlement agreement between DISH and iFit. DISH also filed confidential and public supplements to the petition that included confidential and public versions of the settlement agreement. The petition asserts that rescission is warranted based on changed conditions of fact and law stemming from DISH and iFit reaching a settlement agreement that fully resolves the dispute between DISH and iFit concerning the subject matter of the underlying investigation.

On March 19, 2024, OUII filed a response supporting DISH's petition. No other responses were received in response to the petition.

In consideration of the petition and the response thereto, the Commission has determined to institute a rescission proceeding in this investigation. Consistent with an order issued concurrently herewith, the Commission has determined to rescind the remaining modified remedial orders issued in this investigation. The settlement agreement fully resolves the dispute between DISH and iFit concerning the subject matter of this investigation, the settlement agreement constitutes changed circumstances warranting rescission, and the petition complies with the procedural requirements of Commission Rule 210.76 (19 CFR 210.76). The Commission has further determined to terminate this rescission proceeding.

The Commission vote for these determinations took place on April 9, 2024.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), and in Part 210 of the Commission's Rules of Practice and Procedure (19 CFR part 210).

By order of the Commission.

Issued: April 9, 2024.

Lisa Barton,

Secretary to the Commission.

[FR Doc. 2024–07843 Filed 4–12–24; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

[OMB 1140–0030]

Agency Information Collection Activities; Proposed eCollection eComments Requested; Records and Supporting Data: Importation, Receipt, Storage, and Disposition by Explosives Importers, Manufacturers, Dealers, and Users Licensed Under Title 18 U.S.C. Chapter 40 Explosives

AGENCY: Bureau of Alcohol, Tobacco, Firearms and Explosives, Department of Justice.

ACTION: 30-Day notice.

SUMMARY: The Department of Justice (DOJ), Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995. The proposed information collection was previously published in the **Federal Register**, volume 89 page 8248, on Tuesday, February 6, 2024, allowing a 60-day comment period.

DATES: Comments are encouraged and will be accepted for 30 days until May 15, 2024.

FOR FURTHER INFORMATION CONTACT: If you have comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact: Michael O'Lena, Explosives Industry Programs Branch by email at *eipb-informationcollection@atf.gov* or telephone at 202–648–7120.

SUPPLEMENTARY INFORMATION:

Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility;

—Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;

—Enhance the quality, utility, and clarity of the information to be collected; and/or

—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Written comments and recommendations for this information collection should be submitted within 30 days of the publication of this notice on the following website *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function and entering either the title of the information collection or the OMB Control Number 1140–0030. This

information collection request may be viewed at *www.reginfo.gov.* Follow the instructions to view Department of Justice, information collections currently under review by OMB.

DOJ seeks PRA authorization for this information collection for three (3) years. OMB authorization for an ICR cannot be for more than three (3) years without renewal. The DOJ notes that information collection requirements submitted to the OMB for existing ICRs receive a month-to-month extension while they undergo review.

Overview of This Information Collection

1. *Type of Information Collection:* Extension of a previously approved collection.

2. *Title of the Form/Collection:* Records and Supporting Data: Importation, Receipt, Storage, and Disposition by Explosives Importers, Manufacturers, Dealers, and Users Licensed Under Title 18 U.S.C. Chapter 40 Explosives.

3. *Agency form number, if any, and the applicable component of the Department of Justice sponsoring the collection:* None.

Component: Bureau of Alcohol, Tobacco, Firearms and Explosives, U.S. Department of Justice.

4. *Affected public who will be asked or required to respond, as well as a brief abstract:* Affected Public: Private Sector-for or not for profit institutions, Federal Government.

Abstract: These records show daily activities in the importation, manufacture, receipt, storage, and disposition of all explosives materials covered under 18 U.S.C. Chapter 40. The records are used to show where and to whom explosives materials are distributed.

5. *Obligation to Respond:* Mandatory per 18 U.S.C. 842(f), (g), (j), (k), 843(f) and 847, and are established in the manner set forth in 27 CFR 555.121–129.

6. *Total Estimated Number of Respondents:* 9,096.

7. *Estimated Time per Respondent:* 12.6 hours.

8. *Frequency:* Once annually.

9. *Total Estimated Annual Time Burden:* 573,048 hours.

10. *Total Estimated Annual Other Costs Burden:* $0.

If additional information is required, contact: Darwin Arceo, Department Clearance Officer, Policy and Planning Staff, Justice Management Division, United States Department of Justice, Two Constitution Square, 145 N Street NE, 4W–218, Washington, DC 20530.

Dated: April 10, 2024.

Darwin Arceo,

Department Clearance Officer for PRA, U.S. Department of Justice.

[FR Doc. 2024–07871 Filed 4–12–24; 8:45 am]

BILLING CODE 4410–FY–P

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

[Notice: 024–030]

Heliophysics Advisory Committee; Meeting

AGENCY: National Aeronautics and Space Administration.

ACTION: Notice of meeting.

SUMMARY: In accordance with the Federal Advisory Committee Act, as amended, the National Aeronautics and Space Administration (NASA) announces a meeting of the Heliophysics Advisory Committee (HPAC). This Committee functions in an advisory capacity to the Director, Heliophysics Division, in the NASA Science Mission Directorate. The meeting will be held for the purpose of soliciting, from the science community and other persons, scientific and technical information relevant to program planning.

DATES: Monday, June 17, 2024, 10 a.m. to 5 p.m. and Tuesday, June 18, 2024, 9:30 a.m. to 5 p.m., eastern time.

ADDRESSES: NASA Headquarters, Room 3H42, 300 E Street, SW, Washington, DC 20546.

FOR FURTHER INFORMATION CONTACT: Ms. KarShelia Kinard, Science Mission Directorate, NASA Headquarters, Washington, DC 20546, (202) 358–2355 or *karshelia.kinard@nasa.gov.*

SUPPLEMENTARY INFORMATION: This meeting will be open to the public up to the capacity of the room. The meeting will be available telephonically and via WebEx. Any interested person must use a touch-tone phone to participate in this meeting. To join by telephone, the numbers are: 1–929–251–9612 USA Toll (New York City) or 1–415–527–5035 USA Toll, for each day.

The WebEx link is *https://nasaenterprise.webex.com/nasaenterprise/j.php?MTID=m6d2bc441020eb56ffe9e8e1433e790c7* and the meeting number is 2827 630 2015. The password is HPACSummer2024$ (47227866 from phones and video systems, case sensitive), for each day.

The agenda for the meeting includes the following topics:

- Heliophysics Division (HPD) News, Updates, and New Initiatives
- Specific HPD Research and Analysis Program, Operating Mission and Mission Planning Topics

All attendees are required to register in NASA's Enterprise Visitor Access Management System prior to visit. You will be requested to comply with NASA Headquarters security requirements, including the presentation of a valid picture ID to Security before access to NASA Headquarters in addition to Foreign nationals attending this meeting will be required to provide a copy of their passport and visa in addition to providing the following information no less than 10 days prior to the meeting: full name; gender; date/place of birth; citizenship; passport information (number, country, telephone); visa information (number, type, expiration date); employer/affiliation information (name of institution, address, country, telephone); title/position of attendee. To expedite admittance, attendees with U.S. citizens and Permanent Residents (green card holders) may provide full name, citizenship and email address no less than 3 working days in advance by contacting Ms. KarShelia Kinard via email at *karshelia.kinard@nasa.gov.*

It is imperative that the meeting be held on this date to accommodate the scheduling priorities of the key participants.

Carol J. Hamilton,

Acting Advisory Committee Management Officer, National Aeronautics and Space Administration.

[FR Doc. 2024–07834 Filed 4–12–24; 8:45 am]

BILLING CODE 7510–13–P

NATIONAL FOUNDATION ON THE ARTS AND THE HUMANITIES

Federal Council on the Arts and the Humanities

Arts and Artifacts Indemnity Panel Advisory Committee

AGENCY: Federal Council on the Arts and the Humanities; National Foundation on the Arts and the Humanities.

ACTION: Notice of meeting.

SUMMARY: Pursuant to the Federal Advisory Committee Act, notice is hereby given that the Federal Council on the Arts and the Humanities will hold a meeting of the Arts and Artifacts International Indemnity Panel.

DATES: The meeting will be held on Thursday, May 16, 2024, from 12:00 p.m. until adjourned.

ADDRESSES: The meeting will be held by videoconference originating at the

National Endowment for the Arts, Washington, DC 20506.

FOR FURTHER INFORMATION CONTACT: Elizabeth Voyatzis, Committee Management Officer, 400 7th Street SW, Room 4060, Washington, DC 20506, (202) 606–8322; *evoyatzis@neh.gov.*

SUPPLEMENTARY INFORMATION: The purpose of the meeting is for panel review, discussion, evaluation, and recommendation on applications for Certificates of Indemnity submitted to the Federal Council on the Arts and the Humanities, for exhibitions beginning on or after July 1, 2024. Because the meeting will consider proprietary financial and commercial data provided in confidence by indemnity applicants, and material that is likely to disclose trade secrets or other privileged or confidential information, and because it is important to keep the values of objects to be indemnified and the methods of transportation and security measures confidential, I have determined that that the meeting will be closed to the public pursuant to subsection (c)(4) of section 552b of Title 5, United States Code. I have made this determination under the authority granted me by the Chairman's Delegation of Authority to Close Advisory Committee Meetings, dated April 15, 2016.

Dated: April 10, 2024.

Jessica Graves,

Paralegal Specialist, National Endowment for the Humanities.

[FR Doc. 2024–07877 Filed 4–12–24; 8:45 am]

BILLING CODE 7536–01–P

NUCLEAR REGULATORY COMMISSION

[NRC–2024–0001]

Sunshine Act Meetings

TIME AND DATE: Weeks of April 15, 22, 29, and May 6, 13, 20, 2024. The schedule for Commission meetings is subject to change on short notice. The NRC Commission Meeting Schedule can be found on the internet at: *https://www.nrc.gov/public-involve/public-meetings/schedule.html.*

PLACE: The NRC provides reasonable accommodation to individuals with disabilities where appropriate. If you need a reasonable accommodation to participate in these public meetings or need this meeting notice or the transcript or other information from the public meetings in another format (*e.g.,* braille, large print), please notify Anne Silk, NRC Disability Program Specialist, at 301–287–0745, by videophone at 240–428–3217, or by email at *Anne.Silk@nrc.gov.* Determinations on requests for reasonable accommodation will be made on a case-by-case basis.

STATUS: Public. Members of the public may request to receive the information in these notices electronically. If you would like to be added to the distribution, please contact the Nuclear Regulatory Commission, Office of the Secretary, Washington, DC 20555, at 301–415–1969, or by email at *Betty.Thweatt@nrc.gov* or *Samantha.Miklaszewski@nrc.gov.*

MATTERS TO BE CONSIDERED:

Week of April 15, 2024

There are no meetings scheduled for the week of April 15, 2024.

Week of April 22, 2024—Tentative

Tuesday, April 23, 2024

9:00 a.m. Strategic ProgrammaticOverview of the Fuel FacilitiesandtheSpent Fuel Storage and TransportationBusiness Lines (Public Meeting) (Contact: Haile Lindsay: 301–415–0616)

Additional Information: The meeting will be held in the Commissioners' Hearing Room, 11555 Rockville Pike, Rockville, Maryland. The public is invited to attend the Commission's meeting in person or watch live via webcast at the Web address—*https://video.nrc.gov/.*

Week of April 29, 2024—Tentative

There are no meetings scheduled for the week of April 29, 2024.

Week of May 6, 2024—Tentative

There are no meetings scheduled for the week of May 6, 2024.

Week of May 13, 2024—Tentative

There are no meetings scheduled for the week of May 13, 2024.

Week of May 20, 2024—Tentative

There are no meetings scheduled for the week of May 20, 2024.

CONTACT PERSON FOR MORE INFORMATION: For more information or to verify the status of meetings, contact Wesley Held at 301–287–3591 or via email at *Wesley.Held@nrc.gov.*

The NRC is holding the meetings under the authority of the Government in the Sunshine Act, 5 U.S.C. 552b.

Dated: April 10, 2024.

For the Nuclear Regulatory Commission.

Wesley W. Held,

Policy Coordinator, Office of the Secretary.

[FR Doc. 2024–07948 Filed 4–11–24; 11:15 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

715th Meeting of the Advisory Committee on Reactor Safeguards (ACRS)

In accordance with the purposes of Sections 29 and 182b of the Atomic Energy Act (42 U.S.C. 2039, 2232(b)), the Advisory Committee on Reactor Safeguards (ACRS) will hold meetings on April 30–May 3, 2024. The Committee will be conducting meetings that will include some Members being physically present at the U.S. Nuclear Regulatory Commission (NRC) headquarters office while other Members participate remotely. Interested members of the public are encouraged to participate remotely in any open sessions via Microsoft (MS) Teams or via phone at 301–576–2978, passcode 119337805#. A more detailed agenda including the MS Teams link may be found at the ACRS public website at *https://www.nrc.gov/reading-rm/doc-collections/acrs/agenda/index.html.* If you would like the MS Teams link forwarded to you, please contact the Designated Federal Officer (DFO) as follows: *Quynh.Nguyen@nrc.gov* or *Lawrence.Burkhart@nrc.gov.*

Tuesday, April 30, 2024

8:30 a.m.–8:35 a.m.: Opening Remarks by the ACRS Chair (Open)—The ACRS Chair will make opening remarks regarding the conduct of the meeting.

8:35 a.m.–11:30 a.m.: Monticello Subsequent License Renewal Application (Open)—The Committee will have presentations and discussion with the licensee representatives and NRC staff regarding the subject topic.

11:30 a.m.–2:00 p.m.: Committee Deliberation on the Monticello Subsequent License Renewal Application (Open)—The Committee will deliberate with the NRC staff regarding the subject topic.

2:00 p.m.–5:00 p.m.: Comanche Peak License Renewal Application (Open)—The Committee will have presentations and discussion with the licensee representatives and NRC staff regarding the subject topic.

5:00 p.m.–6:00 p.m.: Committee Deliberation on the Comanche Peak License Renewal Application (Open)—The Committee will deliberate with the NRC staff regarding the subject topic.

Wednesday, May 1, 2024

8:30 a.m.–11:00 a.m.: Westinghouse Topical Report on Incremental High Burnup Extension (Open/Closed)—The Committee will have presentations and discussion with Westinghouse

representatives and NRC staff regarding the subject topic.

[*Note:* Pursuant to 5 U.S.C. 552b(c)(4), a portion of this session may be closed in order to discuss and protect information designated as proprietary.]

11:00 a.m.–2:00 p.m.: Committee Deliberation on the Westinghouse Topical Report on Incrementation High Burnup Extension (Open/Closed)—The Committee will deliberate with the NRC staff regarding the subject topic.

[*Note:* Pursuant to 5 U.S.C. 552b(c)(4), a portion of this session may be closed in order to discuss and protect information designated as proprietary.]

2:00 p.m.–6:00 p.m.: Committee Deliberation on Research Topic—Non-Light Water Reactor Code Development (Open)—The Committee will deliberate and may meet with the NRC staff regarding the subject topic.

Thursday, May 2, 2024

8:30 a.m.–6:00 p.m.: Planning and Procedures Session/Future ACRS Activities/Reconciliation of ACRS Comments and Recommendations/ Preparation of Reports (Open/Closed)—The Committee will hear discussion of the recommendations of the Planning and Procedures Subcommittee regarding items proposed for consideration by the Full Committee during future ACRS meetings, and/or proceed to preparation of reports as determined by the Chair.

[*Note:* Pursuant to 5 U.S.C. 552b(c)(2), a portion of this meeting may be closed to discuss organizational and personnel matters that relate solely to internal personnel rules and practices of the ACRS.]

[*Note:* Pursuant to 5 U.S.C. 552b(c)(4), a portion of this session may be closed in order to discuss and protect information designated as proprietary.]

Friday, May 3, 2024

8:30 a.m.–6:00 p.m.: Committee Deliberation/Preparation of Reports/ Commission Meeting Preparations (Open/Closed).

[*Note:* Pursuant to 5 U.S.C. 552b(c)(4), a portion of this session may be closed in order to discuss and protect information designated as proprietary.]

Procedures for the conduct of and participation in ACRS meetings were published in the **Federal Register** on June 13, 2019 (84 FR 27662). In accordance with those procedures, oral or written views may be presented by members of the public, including representatives of the nuclear industry. Persons desiring to make oral statements should notify Quynh Nguyen, Cognizant ACRS Staff and the DFO (Telephone: 301–415–5844, Email: *Quynh.Nguyen@nrc.gov*), 5 days before the meeting, if possible, so that appropriate arrangements can be made to allow necessary time during the meeting for such statements. In view of the possibility that the schedule for ACRS meetings may be adjusted by the Chair as necessary to facilitate the conduct of the meeting, persons planning to attend should check with the cognizant ACRS staff if such rescheduling would result in major inconvenience.

An electronic copy of each presentation should be emailed to the cognizant ACRS staff at least one day before the meeting.

In accordance with Subsection 10(d) of Public Law 92–463 and 5 U.S.C. 552b(c), certain portions of this meeting may be closed, as specifically noted above. Use of still, motion picture, and television cameras during the meeting may be limited to selected portions of the meeting as determined by the Chair. Electronic recordings will be permitted only during the open portions of the meeting.

ACRS meeting agendas, meeting transcripts, and letter reports are available through the NRC Public Document Room (PDR) at *pdr.resource@nrc.gov,* or by calling the PDR at 1–800–397–4209 or 301–415–4737, between 8 a.m. and 4 p.m. eastern daylight time, Monday through Friday, except Federal holidays, or from the Publicly Available Records System component of NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible from the NRC website at *https://www.nrc.gov/reading-rm/adams.html* or *https://www.nrc.gov/reading-rm/doc-collections/#ACRS/.*

Dated: April 10, 2024

Russell E. Chazell,

Federal Advisory Committee Management Officer, Office of the Secretary.

[FR Doc. 2024–07861 Filed 4–12–24; 8:45 am]

BILLING CODE 7590–01–P

POSTAL REGULATORY COMMISSION

[Docket Nos. MC2024–225 and CP2024–231; MC2026–226 and CP2024–232]

New Postal Products

AGENCY: Postal Regulatory Commission.

ACTION: Notice.

SUMMARY: The Commission is noticing a recent Postal Service filing for the Commission's consideration concerning a negotiated service agreement. This notice informs the public of the filing, invites public comment, and takes other administrative steps.

DATES: *Comments are due:* April 17, 2024.

ADDRESSES: Submit comments electronically via the Commission's Filing Online system at *http://www.prc.gov.* Those who cannot submit comments electronically should contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section by telephone for advice on filing alternatives.

FOR FURTHER INFORMATION CONTACT: David A. Trissell, General Counsel, at 202–789–6820.

SUPPLEMENTARY INFORMATION:

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I. Introduction
II. Docketed Proceeding(s)

I. Introduction

The Commission gives notice that the Postal Service filed request(s) for the Commission to consider matters related to negotiated service agreement(s). The request(s) may propose the addition or removal of a negotiated service agreement from the Market Dominant or the Competitive product list, or the modification of an existing product currently appearing on the Market Dominant or the Competitive product list.

Section II identifies the docket number(s) associated with each Postal Service request, the title of each Postal Service request, the request's acceptance date, and the authority cited by the Postal Service for each request. For each request, the Commission appoints an officer of the Commission to represent the interests of the general public in the proceeding, pursuant to 39 U.S.C. 505 (Public Representative). Section II also establishes comment deadline(s) pertaining to each request.

The public portions of the Postal Service's request(s) can be accessed via the Commission's website (*http://www.prc.gov*). Non-public portions of the Postal Service's request(s), if any, can be accessed through compliance with the requirements of 39 CFR 3011.301.[1]

The Commission invites comments on whether the Postal Service's request(s) in the captioned docket(s) are consistent with the policies of title 39. For request(s) that the Postal Service states concern Market Dominant product(s), applicable statutory and regulatory requirements include 39 U.S.C. 3622, 39 U.S.C. 3642, 39 CFR part 3030, and 39 CFR part 3040, subpart B. For request(s) that the Postal Service states concern Competitive product(s), applicable

[1] *See* Docket No. RM2018–3, Order Adopting Final Rules Relating to Non-Public Information, June 27, 2018, Attachment A at 19–22 (Order No. 4679).

statutory and regulatory requirements include 39 U.S.C. 3632, 39 U.S.C. 3633, 39 U.S.C. 3642, 39 CFR part 3035, and 39 CFR part 3040, subpart B. Comment deadline(s) for each request appear in section II.

II. Docketed Proceeding(s)

1. *Docket No(s).:* MC2024–225 and CP2024–231; *Filing Title:* USPS Request to Add Priority Mail & USPS Ground Advantage Contract 213 to Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* April 9, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3040.130 through 3040.135, and 39 CFR 3035.105; *Public Representative:* Jennaca D. Upperman; *Comments Due:* April 17, 2024.

2. *Docket No(s).:* MC2024–226 and CP2024–232; *Filing Title:* USPS Request to Add Priority Mail & USPS Ground Advantage Contract 214 to Competitive Product List and Notice of Filing Materials Under Seal; *Filing Acceptance Date:* April 9, 2024; *Filing Authority:* 39 U.S.C. 3642, 39 CFR 3040.130 through 3040.135, and 39 CFR 3035.105; *Public Representative:* Jennaca D. Upperman; *Comments Due:* April 17, 2024.

This Notice will be published in the **Federal Register**.

Erica A. Barker,

Secretary.

[FR Doc. 2024–07889 Filed 4–12–24; 8:45 am]

BILLING CODE 7710–FW–P

SECURITIES AND EXCHANGE COMMISSION

[Investment Company Act Release No. 35168; 812–15557]

Aether Infrastructure & Natural Resources Fund and Aether Investment Partners, LLC

April 10, 2024.

AGENCY: Securities and Exchange Commission (''Commission'' or ''SEC'').

ACTION: Notice.

Notice of an application under section 6(c) of the Investment Company Act of 1940 (the ''Act'') for an exemption from sections 18(a)(2), 18(c) and 18(i) of the Act, under sections 6(c) and 23(c) of the Act for an exemption from rule 23c–3 under the Act, and for an order pursuant to section 17(d) of the Act and rule 17d–1 under the Act.

Summary of Application: Applicants request an order to permit certain registered closed-end investment companies to issue multiple classes of shares and to impose asset-based distribution and/or service fees and early withdrawal charges.

Applicants: Aether Infrastructure & Natural Resources Fund and Aether Investment Partners, LLC.

Filing Dates: The application was filed on March 27, 2024.

Hearing or Notification of Hearing: An order granting the requested relief will be issued unless the Commission orders a hearing. Interested persons may request a hearing on any application by emailing the SEC's Secretary at *Secretarys-Office@sec.gov* and serving the Applicants with a copy of the request by email, if an email address is listed for the relevant Applicant below, or personally or by mail, if a physical address is listed for the relevant Applicant below. Hearing requests should be received by the Commission by 5:30 p.m. on May 6, 2024, and should be accompanied by proof of service on the Applicants, in the form of an affidavit, or, for lawyers, a certificate of service. Pursuant to rule 0–5 under the Act, hearing requests should state the nature of the writer's interest, any facts bearing upon the desirability of a hearing on the matter, the reason for the request, and the issues contested. Persons who wish to be notified of a hearing may request notification by emailing the Commission's Secretary.

ADDRESSES: The Commission: *Secretarys-Office@sec.gov.* Applicants: Joshua B. Deringer, Esq., Faegre Drinker Biddle & Reath LLP, *joshua.deringer@faegredrinker.com* with a copy to Sean Goodrich, Aether Investment Partners, LLC, 1900 Sixteen Street, Suite 825, Denver, Colorado 80202.

FOR FURTHER INFORMATION CONTACT: Trace W. Rakestraw, Senior Special Counsel, at (202) 551–6825 (Division of Investment Management, Chief Counsel's Office).

SUPPLEMENTARY INFORMATION: For Applicants' representations, legal analysis, and conditions, please refer to Applicants' application, dated March 27, 2024, which may be obtained via the Commission's website by searching for the file number at the top of this document, or for an Applicant using the Company name search field on the SEC's EDGAR system. The SEC's EDGAR system may be searched at *https://www.sec.gov/edgar/searchedgar/legacy/companysearch.html.* You may also call the SEC's Public Reference Room at (202) 551–8090.

For the Commission, by the Division of Investment Management, under delegated authority.

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07893 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[SEC File No. 270–104, OMB Control No. 3235–0119]

Proposed Collection; Comment Request; Extension: Securities Exchange Act 1934—Rule 12g3–2

Upon Written Request Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE, Washington, DC 20549–2736

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the collection of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget for extension and approval.

Rule 12g3–2 (17 CFR 240.12g3–2) under the Securities Exchange Act of 1934 (the ''Exchange Act'') provides an exemption from Section 12(g) of the Exchange Act (15 U.S.C. 78l(g)) for foreign private issuers. Rule 12g3–2 is designed to provide investors in foreign securities with information about such securities and the foreign issuer. The information filed under Rule 12g3–2 must be filed with the Commission and is publicly available. We estimate that it takes 8.95 hours per response to prepare and is filed by approximately 1,386 respondents. Each respondent files an estimated 12 times submissions pursuant to Rule 12g3–2 per year for a total of 16,632 respondents. We estimate that 25% of 8.95 hours per response (2.237 hours per response) to provide the information required under Rule 12g3–2 for a total annual reporting burden of 37,206 hours (2.237 hours per response × 16,632 responses).

Written comments are invited on: (a) whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden imposed by the collection of information; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication by June 14, 2024.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

Please direct your written comment to David Bottom, Director/Chief Information Officer, Securities and Exchange Commission, c/o John Pezzullo, 100 F Street NE, Washington, DC 20549 or send an email to: *PRA_Mailbox@sec.gov.*

Dated: April 10, 2024.

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07874 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–99924; File No. SR–MIAX–2024–19]

Self-Regulatory Organizations; Miami International Securities Exchange, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rule 531

April 9, 2024.

Pursuant to the provisions of section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on April 2, 2024, Miami International Securities Exchange, LLC (''MIAX'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') a proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to: (i) amend subparagraph (b)(2) of Exchange Rule 531, Reports and Market Data Products, to adjust the timeframe for the Liquidity Taker Event Report—Complex Orders; and (ii) make a non-substantive, clarifying change to a footnote in prior rule filings submitted to the U.S. Securities and Exchange Commission (''Commission'') for immediate effectiveness pursuant to section 19(b)(3)(A) of the Act[3] and Rule 19b–4(f)(6)[4] to adopt the Liquidity Taker Event Report—Simple Orders, Liquidity Taker Event Report—Complex Orders, and Liquidity Taker Event Report—Resting Simple Orders.[5]

The text of the proposed rule change is available on the Exchange's website at *https://www.miaxglobal.com/markets/us-options/miax-options/rule-filings,* at MIAX's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange offers three versions of the Liquidity Taker Event Report: (1) Liquidity Taker Event Report—Simple Orders (referred to herein as the ''Simple Order Report''); (2) Liquidity Taker Event Report—Complex Orders (referred to herein as the ''Complex Order Report''); and (3) Liquidity Taker Event Report—Resting Simple Orders (referred to herein as the ''Resting Simple Order Report'').[6] Each of the Reports are available for purchase by Exchange Members[7] on a voluntary basis. The Exchange's prior rule filings to adopt each Liquidity Taker Event Report were submitted to the Commission for immediate effectiveness pursuant to Section 19(b)(3)(A) of the Act[8] and Rule 19b–4(f)(6) thereunder.[9] Each Liquidity Taker Event Report is described under Exchange Rules 531(a)–(c).[10]

In general, each Liquidity Taker Event Report is a daily report that provides a Member (''Recipient Member'') with its liquidity response time details for executions and contra-side responses of an order (or Complex Order,[11] as the case may be) resting on the Simple Order Book (or Strategy Book, as the case may be),[12] where that Recipient Member attempted to execute against such resting order[13] within a certain timeframe.[14] The content of each of the Reports is specific to the Recipient Member and each Liquidity Taker Event Report does not include any information related to any Member other than the Recipient Member.

The Exchange now proposes to: (i) amend the subparagraph (b)(2) of Exchange Rule 531 to adjust the timeframe from 200 microseconds to 400 microseconds for the Complex

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(3)(A).

[4] 17 CFR 240.19b–4(f)(6).

[5] The Exchange notes that its affiliate, MIAX Emerald, LLC (''MIAX Emerald''), submitted the first filing to adopt the Liquidity Taker Event Report—Simple Orders, pursuant to section 19(b)(2) of the Act. 15 U.S.C. 78s(b)(2). *See* Securities Exchange Act Release Nos. 91356 (March 18, 2021), 86 FR 15759 (March 24, 2021) (SR–EMERALD–2021–09) (Notice of Filing of a Proposed Rule Change To Adopt Exchange Rule 531, Reports, To Provide for the New ''Liquidity Taker Event Report''); *and* 91787 (May 6, 2021), 86 FR 26111 (May 12, 2021) (SR–EMERALD–2021–09) (Order Approving Proposed Rule Change To Adopt Exchange Rule 531(a), Reports, To Provide for a New ''Liquidity Taker Event Report'').

[6] The Simple Order Report, Complex Order Report and Resting Simple Order Report are collectively referred to herein as the ''Reports.''

[7] The term ''Member'' means an individual or organization approved to exercise the trading rights associated with a Trading Permit. Members are deemed ''members'' under the Exchange Act. *See* Exchange Rule 100.

[8] 15 U.S.C. 78s(b)(3)(A).

[9] 17 CFR 240.19b–4(f)(6).

[10] *See* Exchange Rule 531(a)–(c); *see also* Securities Exchange Act Release Nos. 92081 (June 1, 2021), 86 FR 30344 (June 7, 2021) (SR–MIAX–2021–21) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Rule 531, Reports and Market Data Products, to Adopt the Liquidity Taker Event Report); 94135 (February 2, 2022), 87 FR 7217 (February 8, 2022) (SR–MIAX–2022–06) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Rule 531 to Provide for the New Liquidity Taker Event Report—Complex Orders); 96839 (February 8, 2023), 88 FR 9550 (February 14, 2023) (SR–MIAX–2023–02) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change to Amend Rule 531 to Provide for the New Liquidity Taker Event Report—Resting Simple Orders).

[11] In sum, a ''Complex Order'' is ''any order involving the concurrent purchase and/or sale of two or more different options in the same underlying security (the 'legs' or 'components' of the complex order), for the same account, in a conforming or non-conforming ratio. . . .'' *See* Exchange Rule 518(a).

[12] The ''Simple Order Book'' is the Exchange's regular electronic book of orders and quotes. *See* Exchange Rule 518(a)(15). The ''Strategy Book'' is the Exchange's electronic book of complex orders and complex quotes. *See* Exchange Rule 518(a)(17). The Strategy Book is organized by Complex Strategy in that individual orders for a defined Complex Strategy are organized together in a book that is separate from the orders for a different Complex Strategy. The term ''Complex Strategy'' means ''a particular combination of components and their ratios to one another. New complex strategies can be created as the result of the receipt of a complex order or by the Exchange for a complex strategy that is not currently in the System.'' *See* Exchange Rule 518(a)(6).

[13] Only displayed orders are included in the Reports. The Exchange notes that it does not currently offer any non-displayed orders types on its options trading platform.

[14] A complete description of each of the Reports can be found in the prior rule filings to adopt the Reports. *See supra* note 10.

Order Report; and (ii) make a clarifying change to one of the footnotes in the prior filings that adopted the Simple Order Report, Complex Order Report, and Resting Simple Order Report.

Proposal To Amend Subparagraph (b)(2) of Exchange Rule 531 for the Complex Order Report To Adjust the Timeframe

The Exchange proposes to amend the subparagraph (b)(2) of Exchange Rule 531 to adjust the timeframe for the Complex Order Report. Currently, subparagraph (b)(2) provides that the Complex Order Report will include data set forth under Exchange Rule 531(b)(1) [15] for executions and contra-side responses that occurred within 200 microseconds of the time the resting order was received by the Exchange. The Exchange now proposes to amend subparagraph (b)(2) to adjust the timeframe from 200 microseconds to 400 microseconds. Accordingly, with the proposed change, subparagraph (b)(2) of Exchange Rule 531 will provide as follows:

(2) Timeframe. The Liquidity Taker Event Report-Complex Orders will include data listed in paragraph (b)(1) of this Rule 531(b) for executions and contra-side responses that occurred within 400 microseconds of the time the resting order was received by the Exchange.

At the time the Exchange adopted the Complex Order Report, the Exchange believed that 200 microseconds was the appropriate timeframe as it was in line with the previously adopted timeframe for the Simple Order Report. In the Exchange's experience, 200 microseconds has not provided a sufficient amount of time for the System [16] to develop new Complex Strategies, which has resulted in the Complex Order Report missing some of a Recipient Member's Complex Order executions and contra-side responses. Accordingly, expanding the timeframe to 400 microseconds should allow for the intended information to be captured by the Complex Order Report.

Proposal To Amend a Footnote in Each of the Filings To Adopt the Reports (SR–MIAX–2021–21, SR–MIAX–2022–06, and SR–MIAX–2023–02)

The Exchange proposes to make a clarifying change to one of the footnotes in each of the filings to adopt each Liquidity Taker Event Report. Each of the filings to adopt each Liquidity Taker Event Report contains a section that describes information in each report that corresponds to the Recipient Member. Each of the prior filings states that the ''following information would be included in the [Simple Order Report, Complex Order Report, or Resting Simple Order Report] regarding response(s) [Complex Orders] [17] sent by the Recipient Member: (A) Recipient Member identifier; (B) the time difference between the time the first response that executes against the resting order was received by the Exchange and the time of each response [Complex Order] [18] sent by the Recipient Member, regardless of whether it executed or not; (C) size and type of each response [Complex Order] [19] submitted by Recipient Member; and (D) response reference number, which is a unique reference number attached to the response by the Recipient Member.[20] Further, each of the filings includes a footnote at the end of romanette ''(B)'' in the paragraph described above, which states as follows:

For purposes of calculating this duration of time, the Exchange will use the time the resting order and the Recipient Member's response(s) is received by the Exchange's network, both of which would be before the order and response(s) would be received by the System. This time difference would be provided in nanoseconds.[21]

The Exchange proposes to clarify the above footnote. Specifically, the Exchange proposes to replace ''the resting order'' with ''the first response that executes against the resting order.'' Accordingly, with the proposed change, the referenced footnotes in each of the filings to adopt the Reports would read as follows:

For purposes of calculating this duration of time, the Exchange will use the time the first response that executes against the resting order and the Recipient Member's response(s) is received by the Exchange's network, both of which would be before the order and response(s) would be received by the System. This time difference would be provided in nanoseconds.

The purpose of the proposed change is to correct a non-substantive error in a footnote of each rule filing to adopt the Reports. The Exchange notes that the rule text in Exchange Rule 531 that describes each of the Reports was correctly adopted and does not require any change; only the footnote described above needs to be clarified. This change does not impact or alter the information provided to any Recipient Member.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with Section 6(b) of the Act,[22] in general, and furthers the objectives of Section 6(b)(5),[23] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest.

The Exchange believes that the proposal to expand the timeframe for the Complex Order Report would remove impediments to and perfect the mechanism of a free and open market and a national market system because it should provide enough time to the ensure that the Complex Order Report captures all intended activity due to the time it takes for the System to create new Complex Strategies. The Exchange believes that this proposal facilitates transactions in securities because it would ensure the Complex Order Report includes the information the Complex Order Report was meant to capture. The Exchange designed the Complex Order Report for Members that are interested in gaining insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book by providing those Members data to analyze by how much time their Complex Order may have missed an execution against a contra-side order resting on the Strategy Book.[24] By providing this optional latency data to interested Members, it provides greater visibility into the latency of Members'

[15] In general, subparagraph (b)(1) of Exchange Rule 531 includes information regarding (i) the resting order; (ii) execution of the resting order; and (iii) response(s) sent by the Recipient Member. *See* Exchange Rule 531(b)(1)(i)–(iii).

[16] The term ''System'' means the automated trading system used by the Exchange for the trading of securities. *See* Exchange Rule 100.

[17] For the Complex Order Report.

[18] For the Complex Order Report.

[19] For the Complex Order Report.

[20] *See supra* note 10. For the Simple Order Report, *see* Exchange Rule 531(a)(1)(iii); for the Complex Order Report, *see* Exchange Rule 531(b)(1)(iii); for the Resting Simple Order Report, *see* Exchange Rule 531(c)(1)(iii).

[21] *See supra* note 10, 86 FR 30344, at 30345, footnote 20; 87 FR 7217, at 7220, footnote 30; *and* 88 FR 9550, at 9552, footnote 21. The Exchange notes that footnote 30 in the Complex Order Report filing contains an additional sentence that states that the same information is included in the Simple Order Report filing. The remainder of that footnote is the same as the Simple Order Report and Resting Simple Order Report filings.

[22] 15 U.S.C. 78f(b).

[23] 15 U.S.C. 78f(b)(5).

[24] *See* Securities Exchange Act Release No. 94135 (February 2, 2022), 87 FR 7217 (February 8, 2022) (SR–MIAX–2022–06).

incoming orders that they may use to optimize their models and trading patterns in an effort to yield better execution results by calculating by how much time their order may have missed an execution.[25] In turn, this should benefit other market participants who may experience better executions on the Exchange because those that use the Complex Order Report may re-calibrate their trading models and then increase their trading on the Exchange and volume of liquidity removing orders.[26] The Exchange believes that this may lead to an increase in incoming liquidity removing orders resulting in higher execution rates for Members who primarily place resting orders on the Strategy Book. The Exchange believes that the proposed change to adjust the timeframe from 200 microseconds to 400 microseconds for the Complex Order Report will help facilitate transactions in securities by ensuring the Complex Order Report includes all latency data about Recipient Members' missed executions, as the Exchange originally intended when it adopted the Complex Order Report.

The Exchange believes that the proposed change to each of the footnotes described above for each Liquidity Taker Event Report protects investors and the public interest, as well as removes impediments to and perfects the mechanism of a free and open market and a national market system because the change is designed solely to correct non-substantive errors in prior filings, and none which have any impact on the Exchange's actual rule text for each of the Reports. This proposed change does not impact or alter the operation of Exchange Rule 531 regarding the Reports.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule changes will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act, as amended.

Intra-Market Competition

The Exchange believes that the proposed change to the timeframe for the Complex Order Report in the subparagraph (b)(2) of Exchange Rule 531 will not impose any burden on intra-market competition because it will ensure that the Complex Order Report captures all intended activity due to the time it takes for the System to create new Complex Strategies. The Exchange believes that this does not impose any burden on intra-market competition as it simply ensures that Recipient Members gain insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book by providing those Members the full scope of data that was intended to be captured by the Complex Order Report to analyze by how much time their Complex Order may have missed an execution against a contra-side order resting on the Strategy Book. The Exchange believes this does not impose any burden on intra-market competition as the adjusted timeframe should ensure all related activity that is intended to be included for each Recipient Member of the Complex Order Report is actually included. The Exchange notes that the proposed change would not result in any impact on the Exchange's System.

Inter-Market Competition

The Exchange believes the proposed rule change to adjust the timeframe for the Complex Order Report will not impose any burden on inter-market competition as the proposed change is not designed to address any competitive issue but rather is designed to ensure that the Complex Order Report captures all intended activity due to the time it takes for the System to create new Complex Strategies.

Non-Substantive Corrections

The non-substantive corrections to the footnotes in prior filings to adopt each Liquidity Taker Event Report would not impact competition because such changes would not enhance or alter the Exchange's ability to compete, but rather, clarify a prior error which would reduce the potential for inadvertent investor confusion.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

No written comments were either solicited or received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to Section 19(b)(3)(A) of the Act[27] and Rule 19b–4(f)(6) thereunder.[28]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[29] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii)[30] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange stated that the adjusting the timeframe for the Complex Order Report will ensure that the Complex Order Report contains all intended data for Members that are interested in gaining insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book due to the time it takes for the System to create new Complex Strategies. The Exchange also stated that the proposed changes to the footnotes in the filings to adopt each of the Reports would correct non-substantive errors in prior filings. For these reasons, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the 30-day operative delay and designates the proposed rule change operative upon filing.[31]

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

[25] *Id.*

[26] *Id.*

[27] 15 U.S.C. 78s(b)(3)(A).

[28] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

[29] 15 U.S.C. 78s(b)(3)(A).

[30] 17 CFR 240.19b–4(f)(6)(iii).

[31] For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (*https://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include file number SR–MIAX–2024–19 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to file number SR–MIAX–2024–19. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (*https://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR–MIAX–2024–19 and should be submitted on or before May 6, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[32]

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07839 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

[32] 17 CFR 200.30–3(a)(12), (59).

SECURITIES AND EXCHANGE COMMISSION

[SEC File No. 270–125, OMB Control No. 3235–0104]

Proposed Collection; Comment Request; Extension: Form 3—Initial Statement of Beneficial Ownership of Securities

Upon Written Request Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE, Washington, DC 20549–2736

Notice is hereby given that pursuant, to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the collections of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget for extension and approval.

Exchange Act Forms 3 is filed by insiders of public companies that have a class of securities registered under Section 12 of the Exchange Act. Form 3 is an initial statement beneficial ownership of securities. Approximately 16,520 insiders file Form 3 annually and it takes approximately 0.50 hours to prepare for a total of 8,260 annual burden hours (0.50 hours per response × 16,520 responses).

Written comments are invited on: (a) whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden imposed by the collection of information; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given to comments and suggestions submitted in writing within 60 days of this publication by June 14, 2024.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

Please direct your written comment to David Bottom, Director/Chief Information Officer, Securities and Exchange Commission, c/o John Pezzullo, 100 F Street NE, Washington, DC 20549 or send an email to: *PRA_Mailbox@sec.gov.*

Dated: April 9, 2024.

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07841 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[SEC File No. 270–170, OMB Control No. 3235–0167]

Proposed Collection; Comment Request; Extension: Form 15

Upon Written Request Copies Available From: Securities and Exchange Commission, Office of FOIA Services, 100 F Street NE, Washington, DC 20549–2736

Notice is hereby given that, pursuant to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the Securities and Exchange Commission (''Commission'') is soliciting comments on the collection of information summarized below. The Commission plans to submit this existing collection of information to the Office of Management and Budget for extension and approval.

Form 15 (17 CFR 249.323) is a certification of termination of a class of security under Section 12(g) or notice of suspension of duty to file reports pursuant to Sections 13 and 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78a *et seq.*). We estimate that approximately 684 issuers file Form 15 annually and it takes approximately 1.5 hours per response to prepare for a total of 1,026 annual burden hours (1.5 hours per response × 684 responses).

Written comments are invited on: (a) whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden imposed by the collection of information; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology. Consideration will be given

to comments and suggestions submitted in writing within 60 days of this publication by June 14, 2024.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid control number.

Please direct your written comment to David Bottom, Director/Chief Information Officer, Securities and Exchange Commission, c/o John Pezzullo, 100 F Street NE, Washington, DC 20549 or send an email to: *PRA_Mailbox@sec.gov*.

Dated: April 10, 2024.

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07923 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

SECURITIES AND EXCHANGE COMMISSION

[Release No. 34–99923; File No. SR–EMERALD–2024–13]

Self-Regulatory Organizations; MIAX Emerald, LLC; Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rule 531

April 9, 2024.

Pursuant to the provisions of section 19(b)(1) of the Securities Exchange Act of 1934 (''Act'')[1] and Rule 19b–4 thereunder,[2] notice is hereby given that on April 5, 2024, MIAX Emerald, LLC (''MIAX Emerald'' or ''Exchange'') filed with the Securities and Exchange Commission (''Commission'') a proposed rule change as described in Items I and II below, which Items have been prepared by the Exchange. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

I. Self-Regulatory Organization's Statement of the Terms of Substance of the Proposed Rule Change

The Exchange proposes to: (i) amend subparagraph (b)(2) of Exchange Rule 531, Reports, Market Data Products and Services, to adjust the timeframe for the Liquidity Taker Event Report—Complex Orders; and (ii) make a non-substantive, clarifying change to a footnote in prior rule filings submitted to the U.S. Securities and Exchange Commission (''Commission'') for approval pursuant to section 19(b)(2) of the Act[3] and Rule 19b–4[4] to adopt the Liquidity Taker Event Report—Simple Orders, and filings submitted for immediate effectiveness pursuant to section 19(b)(3)(A) of the Act[5] and Rule 19b–4(f)(6)[6] to adopt the Liquidity Taker Event Report—Complex Orders and Liquidity Taker Event Report—Resting Simple Orders.[7]

The text of the proposed rule change is available on the Exchange's website at *https://www.miaxglobal.com/markets/us-options/emerald-options/rule-filings,* at MIAX Emerald's principal office, and at the Commission's Public Reference Room.

II. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, the Exchange included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. The Exchange has prepared summaries, set forth in sections A, B, and C below, of the most significant aspects of such statements.

A. Self-Regulatory Organization's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

1. Purpose

The Exchange offers three versions of the Liquidity Taker Event Report: (1) Liquidity Taker Event Report—Simple Orders (referred to herein as the ''Simple Order Report''); (2) Liquidity Taker Event Report—Complex Orders (referred to herein as the ''Complex Order Report''); and (3) Liquidity Taker Event Report—Resting Simple Orders (referred to herein as the ''Resting Simple Order Report'').[8] Each of the Reports are available for purchase by Exchange Members[9] on a voluntary basis. The Exchange's prior rule filing to adopt the Simple Order Report was submitted to the Commission for approval pursuant to section 19(b)(2) of the Act[10] and Rule 19b–4[11] thereunder and the Exchange's prior filings to adopt the Complex Order Report and Resting Simple Order Report were submitted to the Commission for immediate effectiveness pursuant to section 19(b)(3)(A) of the Act[12] and Rule 19b–4(f)(6) thereunder.[13] Each Liquidity Taker Event Report is described under Exchange Rules 531(a)–(c).[14]

In general, each Liquidity Taker Event Report is a daily report that provides a Member (''Recipient Member'') with its liquidity response time details for executions and contra-side responses of an order (or Complex Order,[15] as the case may be) resting on the Simple Order Book (or Strategy Book, as the case may be),[16] where that Recipient

[1] 15 U.S.C. 78s(b)(1).

[2] 17 CFR 240.19b–4.

[3] 15 U.S.C. 78s(b)(2).

[4] 17 CFR 240.19b–4.

[5] 15 U.S.C. 78s(b)(3)(A).

[6] 17 CFR 240.19b–4(f)(6).

[7] The Exchange notes that it submitted the first filing to adopt the Liquidity Taker Event Report—Simple Orders, pursuant to section 19(b)(2) of the Act. 15 U.S.C. 78s(b)(2). *See* Securities Exchange Act Release Nos. 91356 (March 18, 2021), 86 FR 15759 (March 24, 2021) (SR–EMERALD–2021–09) (Notice of Filing of a Proposed Rule Change To Adopt Exchange Rule 531, Reports, To Provide for the New ''Liquidity Taker Event Report''); *and* 91787 (May 6, 2021), 86 FR 26111 (May 12, 2021) (SR–EMERALD–2021–09) (Order Approving Proposed Rule Change To Adopt Exchange Rule 531(a), Reports, To Provide for a New ''Liquidity Taker Event Report'').

[8] The Simple Order Report, Complex Order Report and Resting Simple Order Report are collectively referred to herein as the ''Reports.''

[9] The term ''Member'' means an individual or organization approved to exercise the trading rights associated with a Trading Permit. Members are deemed ''members'' under the Exchange Act. *See* Exchange Rule 100.

[10] 15 U.S.C. 78s(b)(2).

[11] 17 CFR 240.19b–4.

[12] 15 U.S.C. 78s(b)(3)(A).

[13] 17 CFR 240.19b–4(f)(6).

[14] *See* Exchange Rule 531(a)–(c); *see also* Securities Exchange Act Release Nos. 91356 (March 18, 2021), 86 FR 15759 (March 24, 2021) (SR–EMERALD–2021–09) (Notice of Filing of a Proposed Rule Change To Adopt Exchange Rule 531, Reports, To Provide for the New ''Liquidity Taker Event Report''); 91787 (May 6, 2021), 86 FR 26111 (May 12, 2021) (SR–EMERALD–2021–09) (Order Approving Proposed Rule Change To Adopt Exchange Rule 531(a), Reports, To Provide for a New ''Liquidity Taker Event Report''); 94136 (February 2, 2022), 87 FR 7223 (February 8, 2022) (SR–EMERALD–2022–02) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change To Amend Exchange Rule 531 To Provide for the New Liquidity Taker Event Report—Complex Orders); 96762 (January 27, 2023), 88 FR 7114 (February 2, 2023) (SR–EMERALD–2023–02) (Notice of Filing and Immediate Effectiveness of a Proposed Rule Change by MIAX Emerald, LLC To Amend Exchange Rule 531, Reports, Market Data Products and Services, To Provide for the New ''Liquidity Taker Event Report—Resting Simple Orders'').

[15] In sum, a ''Complex Order'' is ''any order involving the concurrent purchase and/or sale of two or more different options in the same underlying security (the 'legs' or 'components' of the complex order), for the same account, in a conforming or non-conforming ratio. . . .'' *See* Exchange Rule 518(a)(5).

[16] The ''Simple Order Book'' is the Exchange's regular electronic book of orders and quotes. *See* Exchange Rule 518(a)(17). The ''Strategy Book'' is the Exchange's electronic book of complex orders and complex quotes. *See* Exchange Rule 518(a)(19). The Strategy Book is organized by Complex Strategy in that individual orders for a defined Complex Strategy are organized together in a book that is separate from the orders for a different Complex Strategy. The term ''Complex Strategy'' means ''a particular combination of components and their ratios to one another. New complex strategies can

Continued

Member attempted to execute against such resting order [17] within a certain timeframe.[18] The content of each of the Reports is specific to the Recipient Member and each Liquidity Taker Event Report does not include any information related to any Member other than the Recipient Member.

The Exchange now proposes to: (i) amend the subparagraph (b)(2) of Exchange Rule 531 to adjust the timeframe from 200 microseconds to 400 microseconds for the Complex Order Report; and (ii) make a clarifying change to one of the footnotes in the prior filings that adopted the Simple Order Report, Complex Order Report, and Resting Simple Order Report.

Proposal To Amend Subparagraph (b)(2) of Exchange Rule 531 for the Complex Order Report To Adjust the Timeframe

The Exchange proposes to amend the subparagraph (b)(2) of Exchange Rule 531 to adjust the timeframe for the Complex Order Report. Currently, subparagraph (b)(2) provides that the Complex Order Report will include data set forth under Exchange Rule 531(b)(1) [19] for executions and contra-side responses that occurred within 200 microseconds of the time the resting order was received by the Exchange. The Exchange now proposes to amend subparagraph (b)(2) to adjust the timeframe from 200 microseconds to 400 microseconds. Accordingly, with the proposed change, subparagraph (b)(2) of Exchange Rule 531 will provide as follows:

(2) Timeframe. The Liquidity Taker Event Report-Complex Orders will include data listed in paragraph (b)(1) of this Rule 531(b) for executions and contra-side responses that occurred within 400 microseconds of the time the resting order was received by the Exchange.

At the time the Exchange adopted the Complex Order Report, the Exchange believed that 200 microseconds was the appropriate timeframe as it was in line with the previously adopted timeframe for the Simple Order Report. In the Exchange's experience, 200 microseconds has not provided a sufficient amount of time for the System [20] to develop new Complex Strategies, which has resulted in the Complex Order Report missing some of a Recipient Member's Complex Order executions and contra-side responses. Accordingly, expanding the timeframe to 400 microseconds should allow for the intended information to be captured by the Complex Order Report.

Proposal To Amend a Footnote in Each of the Filings To Adopt the Reports (SR–EMERALD–2021–09, SR–EMERALD–2022–02, and SR–EMERALD–2023–02)

The Exchange proposes to make a clarifying change to one of the footnotes in each of the filings to adopt each Liquidity Taker Event Report. Each of the filings to adopt each Liquidity Taker Event Report contains a section that describes information in each report that corresponds to the Recipient Member. Each of the prior filings states that the ''following information would be included in the [Simple Order Report, Complex Order Report, or Resting Simple Order Report] regarding response(s) [Complex Orders] [21] sent by the Recipient Member: (A) Recipient Member identifier; (B) the time difference between the time the first response that executes against the resting order was received by the Exchange and the time of each response [Complex Order] [22] sent by the Recipient Member, regardless of whether it executed or not; (C) size and type of each response [Complex Order] [23] submitted by Recipient Member; and (D) response reference number, which is a unique reference number attached to the response by the Recipient Member.[24] Further, each of the filings includes a footnote at the end of romanette ''(B)'' in the paragraph described above, which states as follows:

For purposes of calculating this duration of time, the Exchange will use the time the resting order and the Recipient Member's response(s) is received by the Exchange's network, both of which would be before the order and response(s) would be received by the System. This time difference would be provided in nanoseconds.[25]

The Exchange proposes to clarify the above footnote. Specifically, the Exchange proposes to replace ''the resting order'' with ''the first response that executes against the resting order.'' Accordingly, with the proposed change, the referenced footnotes in each of the filings to adopt the Reports would read as follows:

For purposes of calculating this duration of time, the Exchange will use the time the first response that executes against the resting order and the Recipient Member's response(s) is received by the Exchange's network, both of which would be before the order and response(s) would be received by the System. This time difference would be provided in nanoseconds.

The purpose of the proposed change is to correct a non-substantive error in a footnote of each rule filing to adopt the Reports. The Exchange notes that the rule text in Exchange Rule 531 that describes each of the Reports was correctly adopted and does not require any change; only the footnote described above needs to be clarified. This change does not impact or alter the information provided to any Recipient Member.

2. Statutory Basis

The Exchange believes that the proposed rule change is consistent with section 6(b) of the Act,[26] in general, and furthers the objectives of section 6(b)(5),[27] in particular, because it is designed to prevent fraudulent and manipulative acts and practices, promote just and equitable principles of trade, foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, protect investors and the public interest.

The Exchange believes that the proposal to expand the timeframe for the Complex Order Report would remove impediments to and perfect the mechanism of a free and open market and a national market system because it should provide enough time to the ensure that the Complex Order Report

be created as the result of the receipt of a complex order or by the Exchange for a complex strategy that is not currently in the System. The Exchange may limit the number of new complex strategies that may be in the System at a particular time and will communicate this limitation to Members via Regulatory Circular.'' *See* Exchange Rule 518(a)(6).

[17] Only displayed orders are included in the Reports. The Exchange notes that it does not currently offer any non-displayed orders on its options trading platform.

[18] A complete description of each of the Reports can be found in the prior rule filings to adopt the Reports. *See supra* note 14.

[19] In general, subparagraph (b)(1) of Exchange Rule 531 includes information regarding (i) the resting order; (ii) execution of the resting order; and (iii) response(s) sent by the Recipient Member. *See* Exchange Rule 531(b)(1)(i)–(iii).

[20] The term ''System'' means the automated trading system used by the Exchange for the trading of securities. *See* Exchange Rule 100.

[21] For the Complex Order Report.

[22] For the Complex Order Report.

[23] For the Complex Order Report.

[24] *See supra* note 14. For the Simple Order Report, *see* Exchange Rule 531(a)(1)(iii); for the Complex Order Report, *see* Exchange Rule 531(b)(1)(iii); for the Resting Simple Order Report, *see* Exchange Rule 531(c)(1)(iii).

[25] *See supra* note 14, 86 FR 15759, at 15760, footnote 23; 87 FR 7223, at 7226, footnote 30; *and* 88 FR 7114, at 7116, footnote 20. The Exchange notes that footnote 30 in the Complex Order Report filing contains an additional sentence that states that the same information is included in the Simple Order Report filing. The remainder of that footnote is the same as the Simple Order Report and Resting Simple Order Report filings.

[26] 15 U.S.C. 78f(b).

[27] 15 U.S.C. 78f(b)(5).

captures all intended activity due to the time it takes for the System to create new Complex Strategies. The Exchange believes that this proposal facilitates transactions in securities because it would ensure the Complex Order Report includes the information the Complex Order Report was meant to capture. The Exchange designed the Complex Order Report for Members that are interested in gaining insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book by providing those Members data to analyze by how much time their Complex Order may have missed an execution against a contra-side order resting on the Strategy Book.[28] By providing this optional latency data to interested Members, it provides greater visibility into the latency of Members' incoming orders that they may use to optimize their models and trading patterns in an effort to yield better execution results by calculating by how much time their order may have missed an execution.[29] In turn, this should benefit other market participants who may experience better executions on the Exchange because those that use the Complex Order Report may re-calibrate their trading models and then increase their trading on the Exchange and volume of liquidity removing orders.[30] The Exchange believes that this may lead to an increase in incoming liquidity removing orders resulting in higher execution rates for Members who primarily place resting orders on the Strategy Book. The Exchange believes that the proposed change to adjust the timeframe from 200 microseconds to 400 microseconds for the Complex Order Report will help facilitate transactions in securities by ensuring the Complex Order Report includes all latency data about Recipient Members' missed executions, as the Exchange originally intended when it adopted the Complex Order Report.

The Exchange believes that the proposed change to each of the footnotes described above for each Liquidity Taker Event Report protects investors and the public interest, as well as removes impediments to and perfects the mechanism of a free and open market and a national market system because the change is designed solely to correct non-substantive errors in prior filings, and none which have any impact on the Exchange's actual rule text for each of the Reports. This proposed change does not impact or alter the operation of Exchange Rule 531 regarding the Reports.

B. Self-Regulatory Organization's Statement on Burden on Competition

The Exchange does not believe that the proposed rule changes will impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act, as amended.

Intra-Market Competition

The Exchange believes that the proposed change to the timeframe for the Complex Order Report in the subparagraph (b)(2) of Exchange Rule 531 will not impose any burden on intra-market competition because it will ensure that the Complex Order Report captures all intended activity due to the time it takes for the System to create new Complex Strategies. The Exchange believes that this does not impose any burden on intra-market competition as it simply ensures that Recipient Members gain insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book by providing those Members the full scope of data that was intended to be captured by the Complex Order Report to analyze by how much time their Complex Order may have missed an execution against a contra-side order resting on the Strategy Book. The Exchange believes this does not impose any burden on intra-market competition as the adjusted timeframe should ensure all related activity that is intended to be included for each Recipient Member of the Complex Order Report is actually included. The Exchange notes that the proposed change would not result in any impact on the Exchange's System.

Inter-Market Competition

The Exchange believes the proposed rule change to adjust the timeframe for the Complex Order Report will not impose any burden on inter-market competition as the proposed change is not designed to address any competitive issue but rather is designed to ensure that the Complex Order Report captures all intended activity due to the time it takes for the System to create new Complex Strategies.

Non-Substantive Corrections

The non-substantive corrections to the footnotes in prior filings to adopt each Liquidity Taker Event Report would not impact competition because such changes would not enhance or alter the Exchange's ability to compete, but rather, clarify a prior error which would reduce the potential for inadvertent investor confusion.

C. Self-Regulatory Organization's Statement on Comments on the Proposed Rule Change Received From Members, Participants, or Others

Written comments were neither solicited nor received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Because the foregoing proposed rule change does not: (i) significantly affect the protection of investors or the public interest; (ii) impose any significant burden on competition; and (iii) become operative for 30 days from the date on which it was filed, or such shorter time as the Commission may designate, it has become effective pursuant to section 19(b)(3)(A) of the Act[31] and Rule 19b–4(f)(6) thereunder.[32]

A proposed rule change filed pursuant to Rule 19b–4(f)(6) under the Act[33] normally does not become operative for 30 days after the date of its filing. However, Rule 19b–4(f)(6)(iii)[34] permits the Commission to designate a shorter time if such action is consistent with the protection of investors and the public interest. The Exchange has requested that the Commission waive the 30-day operative delay so that the proposal may become operative immediately upon filing. The Exchange stated that the adjusting the timeframe for the Complex Order Report will ensure that the Complex Order Report contains all intended data for Members that are interested in gaining insight into latency in connection with Complex Orders that failed to execute against an order resting on the Exchange's Strategy Book due to the time it takes for the System to create new Complex Strategies. The Exchange also stated that the proposed changes to the footnotes in the filings to adopt each of the Reports would correct non-substantive errors in prior filings. For these reasons, the Commission believes that waiver of the 30-day operative delay is consistent with the protection of investors and the public interest. Accordingly, the Commission hereby waives the 30-day operative delay and

[28] *See* Securities Exchange Act Release No. 94136 (February 2, 2022), 87 FR 7223 (February 8, 2022) (SR–EMERALD–2022–02).

[29] *Id.*

[30] *Id.*

[31] 15 U.S.C. 78s(b)(3)(A).

[32] 17 CFR 240.19b–4(f)(6). In addition, Rule 19b–4(f)(6)(iii) requires a self-regulatory organization to give the Commission written notice of its intent to file the proposed rule change, along with a brief description and text of the proposed rule change, at least five business days prior to the date of filing of the proposed rule change, or such shorter time as designated by the Commission. The Exchange has satisfied this requirement.

[33] 15 U.S.C. 78s(b)(3)(A).

[34] 17 CFR 240.19b–4(f)(6)(iii).

designates the proposed rule change operative upon filing.[35]

At any time within 60 days of the filing of such proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act. If the Commission takes such action, the Commission shall institute proceedings to determine whether the proposed rule should be approved or disapproved.

IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

Electronic Comments

- Use the Commission's internet comment form (*https://www.sec.gov/rules/sro.shtml*); or
- Send an email to *rule-comments@sec.gov.* Please include file number SR–EMERALD–2024–13 on the subject line.

Paper Comments

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street NE, Washington, DC 20549–1090.

All submissions should refer to file number SR–EMERALD–2024–13. This file number should be included on the subject line if email is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's internet website (*https://www.sec.gov/rules/sro.shtml*). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street NE, Washington, DC 20549, on official business days between the hours of 10 a.m. and 3 p.m. Copies of the filing also will be available for inspection and copying at the principal office of the Exchange. Do not include personal identifiable information in submissions; you should submit only information that you wish to make available publicly. We may redact in part or withhold entirely from publication submitted material that is obscene or subject to copyright protection. All submissions should refer to file number SR–EMERALD–2024–13 and should be submitted on or before May 6, 2024.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.[36]

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–07840 Filed 4–12–24; 8:45 am]

BILLING CODE 8011–01–P

[35] For purposes only of waiving the 30-day operative delay, the Commission has also considered the proposed rule's impact on efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f).

[36] 17 CFR 200.30–3(a)(12), (59).

SMALL BUSINESS ADMINISTRATION

[Disaster Declaration # 20198 and # 20199; Rhode Island Disaster Number RI–20003]

Presidential Declaration of a Major Disaster for the State of Rhode Island; Correction

AGENCY: U.S. Small Business Administration.

ACTION: Correction.

SUMMARY: This is a correction to the Presidential declaration of a major disaster for the State of Rhode Island (FEMA–4766–DR), dated 03/20/2024.

Incident: Severe Storms and Flooding.

Incident Period: 01/09/2024 through 01/13/2024.

DATES: Issued on 04/04/2024.

Physical Loan Application Deadline Date: 05/20/2024.

Economic Injury (EIDL) Loan Application Deadline Date: 12/23/2024.

ADDRESSES: Visit the MySBA Loan Portal at *https://lending.sba.gov* to apply for a disaster assistance loan.

FOR FURTHER INFORMATION CONTACT: Alan Escobar, Office of Disaster Recovery & Resilience, U.S. Small Business Administration, 409 3rd Street SW, Suite 6050, Washington, DC 20416, (202) 205–6734.

SUPPLEMENTARY INFORMATION: The notice of the President's major disaster declaration for the State of Rhode Island, dated 03/20/2024, published at 89 FR 21654, is hereby corrected to include Newport County, Rhode Island as a contiguous county as a result of the President's major disaster declaration on 03/20/2024. Applications for disaster loans may be submitted online using the MySBA Loan Portal *https://lending.sba.gov* or other locally announced locations. Please contact the SBA disaster assistance customer service center by email at *disastercustomerservice@sba.gov* or by phone at 1–800–659–2955 for further assistance.

The following areas have been determined to be adversely affected by the disaster:

Primary Counties (Physical Damage and Economic Injury Loans): Kent, Providence, Washington.

Contiguous Counties (Economic Injury Loans Only):

RHODE ISLAND: Bristol, Newport

CONNECTICUT: Windham, New London

MASSACHUSETTS: Worcester, Bristol, Norfolk

The Interest Rates are:

	Percent
For Physical Damage:	
Homeowners with Credit Available Elsewhere	5.375
Homeowners without Credit Available Elsewhere	2.688
Businesses with Credit Available Elsewhere	8.000
Businesses without Credit Available Elsewhere	4.000
Non-Profit Organizations with Credit Available Elsewhere	3.250
Non-Profit Organizations without Credit Available Elsewhere	3.250
For Economic Injury:	
Business and Small Agricultural Cooperatives without Credit Available Elsewhere	4.000
Non-Profit Organizations without Credit Available Elsewhere	3.250

The number assigned to this disaster for physical damage is 201986 and for economic injury is 201990.

(Catalog of Federal Domestic Assistance Number 59008)

Francisco Sánchez, Jr.,

Associate Administrator, Office of Disaster Recovery & Resilience.

[FR Doc. 2024–07867 Filed 4–12–24; 8:45 am]

BILLING CODE 8026–09–P

SMALL BUSINESS ADMINISTRATION

SBA Form 770 "Financial Statement of Debtor"

AGENCY: U.S. Small Business Administration

ACTION: 60-Day notice and request for comments.

SUMMARY: The Small Business Administration (SBA) intends to request approval from the Office of Management and Budget (OMB) for the collection of information described below. The Paperwork Reduction Act (PRA) of 1995, requires Federal agencies to publish a notice in the **Federal Register** concerning each proposed collection of information before submission to OMB, and to allow 60 days for public comment in response to the notice. This notice complies with that requirement.

DATES: Submit comments on or before June 14, 2024.

ADDRESSES: Email all comments to: Cynthia Smith, Office of Financial Program Operations, Small Business Administration, at *Cynthia.Smith@sba.gov.*

FOR FURTHER INFORMATION CONTACT: Cynthia Smith, Office of Financial Program Operations, Small Business Administration, at (703) 467–3620 or *Cynthia.Smith@sba.gov,* or Adrienne Grierson, Deputy Director Office of Financial Program Operations, 202–205–6573, *adrienne.grierson@sba.gov,* or Curtis B. Rich, Agency Clearance Officer, 202–205–7030, *curtis.rich@sba.gov.* The phone numbers above may also be reached by individuals who are deaf or hard of hearing, or who have speech disabilities, through the Federal Communications Commission's TTY-Based Telecommunications Relay Service teletype service at 711.

SUPPLEMENTARY INFORMATION: This PRA submission is for SBA Form 770 (OMB Control No. 3245–0012), Financial Statement of Debtor. The primary purpose for collecting this information is to evaluate the debtor's financial capacity to repay the debt owed to the Agency and determine to what extent the Agency may compromise the debt, maximize recovery, and protect the interests of the Agency. Forms are to be completed and signed by the obligor and then submitted to the lender or Forms are to be completed and signed by the Borrower/Obligor and then submitted to the SBA Disaster Loan Servicing Center handling the account.

SBA is requesting a 3-year extension. NGPC address was updated. Servicing center CESC address, fax and email were added. This non-substantive change will not have a significant impact on the burden. As stated in the supporting statement, the certifications and information collected remain the same.

Solicitation of Public Comments

SBA is requesting comments on (i) Whether the collection of information is necessary for the agency to properly perform its functions; (ii) whether the burden estimates are accurate; (iii) whether there are ways to minimize the burden, including using automated techniques or other forms of information technology; and (iv) whether there are ways to enhance the quality, utility, and clarity of the information.

Summary of Information Collection

Title: Financial Statement of Debtor.
Form Numbers: SBA Form 770.
OMB Control Number: 3245–0012.
Description of Respondents: SBA Borrowers.
Estimated Number of Respondents: 5,000.
Frequency of Response per Respondent: 1.
Total Estimated Annual Responses: 5,000.
Total Estimated Annual Hour Burden: 1 hours per respondent, for a total of 5,000 hours.

Curtis Rich,

Agency Clearance Officer.

[FR Doc. 2024–07886 Filed 4–12–24; 8:45 am]

BILLING CODE 8026–09–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

[Docket No. FHWA–2024–0027]

Notice of Intent To Prepare an Environmental Impact Statement

AGENCY: Federal Highway Administration (FHWA), Department of Transportation (USDOT).

ACTION: Notice of intent to prepare an environmental impact statement (EIS).

SUMMARY: FHWA, in coordination with the Minnesota Department of Transportation (MnDOT), is issuing this Notice of Intent (NOI) to solicit comment and advise the public, agencies, and stakeholders that an Environmental Impact Statement (EIS) will be prepared to study potential improvements to the Highway 252 (Hwy 252) corridor in Hennepin County from Highway 610 (Hwy 610) to the Hwy 252/Interstate 94 (I–94)/Interstate 694 (I–694) interchange, and the I–94 corridor from the Hwy 252/I–94/I–694 interchange to North Fourth Street and North Third Street in downtown Minneapolis. This notice also requests identification of potential alternatives, information, and analyses relevant to the proposed action. Persons or agencies who may be affected by the proposed Hwy 252/I–94 Project (Project) are encouraged to comment on the information in this NOI. All comments received in response to this NOI document will be considered and any information presented herein, including the preliminary alternatives and identified impacts, may be revised in consideration of the comments.

DATES: Comments must be received on or before May 15, 2024.

ADDRESSES: This NOI and Additional Project Information Documents are available in the docket referenced above at *www.regulations.gov* and on the Project website located at *www.dot.state.mn.us/metro/projects/hwy252study.* The Additional Project Information Documents can also be mailed upon request. Interested parties are invited to submit comments by any of the following methods:

Website: For access to the documents, go to the Federal eRulemaking Portal located at *www.regulations.gov* or the Project website located at *www.dot.state.mn.us/metro/projects/hwy252study.* Follow the online instructions for submitting comments.

Mailing address or for hand delivery or courier: Federal Highway Administration Minnesota Division, Attn: Anna Varney, 180 East Fifth Street, Suite 930, Saint Paul, MN 55101.

All submissions should include the agency name and the docket number that appears in the heading of this notice. All comments received will be posted without change to *www.regulations.gov,* including any personal information provided. A summary of the comments received will be included in the Draft EIS.

FOR FURTHER INFORMATION CONTACT: *FHWA:* Anna Varney, Major Projects Engineer, Federal Highway Administration—Minnesota Division, 180 East Fifth Street, Suite 930, St. Paul MN 55101; email: *anna.varney@dot.gov;* 651–291–6117.

MnDOT: Amber Blanchard, Major Projects Manager, Metro District Headquarters, 1500 West County Road B–2, Roseville, MN 55113; email: *amber.blanchard@state.mn.us;* phone: 651–234–7770.

SUPPLEMENTARY INFORMATION: FHWA and MnDOT are committed to public involvement in the Project. All public comments received in response to this notice will be considered and potential revisions made to the information presented herein as appropriate. The environmental review of transportation improvement alternatives for the Hwy 252/I–94 study area will be conducted in accordance with the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C.] 4321, *et seq.*), 23 U.S.C. 139, Council on Environmental

Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508), FHWA regulations implementing NEPA (23 CFR 771.101–771.139), and applicable Federal, State, and local laws and regulations.

Additional Project Information Documents prepared by MnDOT in coordination with FHWA are available in the docket and on the Project website include: Scoping Document/Draft Scoping Decision Document (SD/DSDD), Scoping Decision Document (SDD), Public Engagement Plan, Agency Coordination Plan and Evaluation Process Figure.

Background

FHWA and MnDOT are exploring opportunities to improve safety and mobility for people walking, biking, using transit and driving on and/or across Hwy 252 and I–94 in the cities of Brooklyn Park, Brooklyn Center, and Minneapolis, Minnesota. The Project corridor is approximately 12 miles long, following the Hwy 252 corridor from Hwy 610 to the Hwy 252/I–94/I–694 system interchange, and the I–94 corridor from the Hwy 252/I–94/I–694 system interchange to North Fourth Street and North Third Street in downtown Minneapolis.

Since 2016, several transportation studies have identified and analyzed existing safety, congestion, and neighborhood connectivity issues along the Project corridor. In 2017, Metropolitan Council and MnDOT completed a *Principal Arterial Intersection Conversion Study* which identified the Hwy 252 corridor as a high-priority corridor. In 2018 and 2019, Hennepin County led an Environmental Assessment (EA) process for the corridor. Due to the magnitude and complexity of the Project, as well as the amount of public input received during the EA phase, MnDOT and FHWA made the decision in 2020 to prepare an EIS.

In 2021, the Project entered a scoping phase resulting in the development of a Project SD/DSDD and Project SDD which provides initial documentation of the proposed action and need for the Project and early decisions made in accordance with the Minnesota Environmental Policy Act (MEPA) and Minnesota Rules 4410. The Project SDD is intended to reduce the scope and bulk of the EIS by identifying a reasonable range of alternatives as well as substantive issues and level of detail to be studied in the EIS. Community and agency engagement in support of this process was robust and generated substantial feedback.

The Purpose and Need for the Proposed Action

The purpose of the Project is to improve the safe and reliable movement of people and goods across multiple modes on and across Hwy 252 and I–94 between Hwy 610 in Brooklyn Park and North 4th Street in Minneapolis. The *Purpose and Need Statement Report* appended to the Project SD/DSDD includes a detailed description of existing conditions in the Project study area. Topics addressed include corridor history; existing traffic and physical characteristics; existing transit service (bus routes, park and ride facilities, existing transit advantages); corridor demographics; pedestrian and bicycle infrastructure; and previous studies. The following needs have been identified for the study:

(a) Vehicle Safety

The vehicle safety performance of Hwy 252 is considered deficient based on number of crashes, crash rates, and crash indices. Most Hwy 252 crashes occur at the 85th Avenue intersection in Brooklyn Park and at the 66th Avenue intersection in Brooklyn Center. Over the 4-year period from 2016 to 2019, a total of 1,512 crashes were reported on Hwy 252, of which 654 occurred at intersections. Eleven of the 1,512 crashes resulted in a fatality or severe injury. The crash rate at each of the 6 intersections along Hwy 252, as well as the non-intersection crash rate, was above the critical crash rate, which indicates that there is a vehicle safety concern.

I–94 also experiences a high number of crashes for this facility type. There were 914 reported crashes on I–94 between 2016 and 2019 including 5 fatal crashes and 5 serious injury crashes. The crash rate on I–94 during this time period was also above the critical crash rate, again indicating a vehicle safety concern.

(b) Vehicle Mobility Including Transit

The vehicle mobility performance of Hwy 252 is considered deficient based on operations and travel time reliability during peak periods. The congestion on Hwy 252 is expected to get worse in the future with the No Build Alternative. Northbound I–94 experiences congestion during the afternoon peak period because of operations at the I–94/I–694/Hwy 252 system interchange and traffic queues spilling back from I–694. The I–94 corridor within the Project limits has one of the highest express bus ridership numbers in the Twin Cities Metropolitan Area (based on 2019 ridership data). As congestion increases under the No Build Alternative, it will be important to maintain bus on-time performance on Hwy 252 and I–94 and potentially mitigate future sources of bus delay along the corridor.

(c) Walkability and Bikeability

Hwy 252 and I–94 create physical barriers to east-west travel for pedestrians and bicyclists in the Project area communities. Pedestrian and bicycling traffic crossing Hwy 252 is likely low due to perceptions of unsafe conditions for people crossing the corridor by foot or bike. Hwy 252 can be challenging and uncomfortable to cross for some pedestrians and bicyclists due to the number of lanes, crossing distances, and vehicle speeds. Multiple fatal crashes involving motor vehicles and vulnerable users have occurred in the Project area (*e.g.,* pedestrians and bicyclists). Between 2016—2019, pedestrian or bicycle crashes with vehicles resulted in one fatality and two serious injuries.

Pedestrians and bicyclists can also experience long delay times when waiting to cross Hwy 252. Once able to cross, the signal cycle time may not feel adequate for some users. The I–94 crossing experiences have varying degrees of pedestrian and bicycle levels of service at the various locations throughout the corridor.

Purpose and Need Development

The Purpose and Need statement explains why MnDOT is undertaking the proposed action and what its objectives are. The identified needs are transportation deficiencies or problems to be addressed. The ''Purpose'' is a broad statement of the primary intended transportation result and other related objectives to be achieved by a proposed transportation improvement. The Draft EIS will include the Purpose and Need statement and supporting documentation, including data and public input summary developed during the SD/DSDD phase. The agency may consider revisions to the Purpose and Need statement if new substantiating transportation data or information is learned through the comment period on this notice.

A Preliminary Description of the Proposed Action and Alternatives the Environmental Impact Statement Will Consider

FHWA and MnDOT propose improvements to 12 miles along the Hwy 252 and I–94 corridor, including, but not limited to, converting Hwy 252 to a grade separated freeway with interchanges, adding managed lanes, and providing bicycle/pedestrian grade

separated crossings. Corridor elements for the Project have been evaluated in the SD/DSDD based on a 3-step Alternatives Evaluation Process as shown in Figure 6.1 in the SD/DSDD:

- *Step 1:* Identified corridor elements and determined if these elements would address the problems that led to the initiation of the Project.
- *Step 2:* Developed corridor elements and evaluated the transportation performance of these elements (qualitative and quantitative assessment). Conducted initial qualitative assessment of social, economic, and environmental impacts.
- *Step 3:* Refined and evaluated the transportation performance of corridor elements, including location and type of access on Hwy 252. Refined and evaluated prudent additional connections across I–94 and evaluated the number of lanes and what type of lanes on Hwy 252 and I–94. Qualitative and quantitative evaluation of social, economic, and environmental (SEE) impacts. The outcome of Step 3 was the identification of corridor elements and alternatives for further study in the Draft EIS.

Using this Alternatives Evaluation Process, a wide range of potential corridor elements were identified for Hwy 252 and I–94 in the SD/DSDD. Hwy 252 and I–94 elements for corridor alternatives were evaluated independently from one another during the scoping process using evaluation criteria established for their respective impact areas and their respective performance. Based on the Step 2 evaluation of Hwy 252 and I–94 elements, many corridor alternatives were dismissed from further consideration based on performance measures used to evaluate their ability to address the transportation Purpose and Need.

Step 3 included qualitative and quantitative transportation and social, economic, and environmental (SEE) performance measures. The SD/DSDD includes a traffic analysis for corridor elements and corridor alternatives, including traffic modeling methodologies and travel demand forecasts. Additional information on the Range of Alternatives is also provided in the SD/DSDD and SDD.

Below are descriptions of the No Build Alternative and Corridor Elements recommended in Step 3 of the Alternative Evaluation to be studied further in the EIS in Step 4 as outlined in the Evaluation Process Figure in the docket.

(a) No Build Alternative

Documentation of a No Build Alternative is required as part of the NEPA and MEPA processes to act as a baseline scenario in the alternatives screening and evaluation process. The No Build Alternative would maintain the current roadway geometry, lane configuration, and other existing conditions within the logical termini with no additional improvements to address needs in the Hwy 252/I–94 study area. The No Build Alternative presumes that there will be ongoing preventative maintenance work but does not provide either the scope of preventative maintenance or any environmental clearance. The No Build Alternative includes maintaining the existing number of lanes, intersections, overpass bridges, transit advantages, and pedestrian and bicycle facilities on Hwy 252 and I–94

(b) Build Alternatives

MnDOT and FHWA will follow an iterative stepped process to select a preferred alternative. The Draft EIS will build upon and refine the alternatives that were developed and retained from the DSDD/SDD (Steps 1–3). The Draft EIS will assess whether the Hwy 252 corridor should go over or under the local crossroad at the potential interchange locations (Step 4—Phase 1A), as well as consider a variety of access combinations along Hwy 252 (Step 4—Phase 1B). Each alternative to be studied in the Draft EIS will cover the entire 12-mile Project corridor and include a combination of one of the Hwy 252 corridor elements retained from the SDD incorporating the recommendations from Step 4—Phases 1A and 1B with one of the I–94 corridor elements retained from the SDD (Step 4—Phase 2)

Hwy 252

Additional details on the criteria used to refine Hwy 252 access combinations and corridor elements are provided in the SD/DSDD.

Hwy 252 Corridor (Over or Under) Local Road

Step 4—Phase 1A of the Draft EIS: An evaluation of the SEE impacts of having Hwy 252 over or under the local road will be conducted to select a recommended vertical location of the Hwy 252 corridor at each interchange location.

Hwy 252 Access Combinations

Step 4—Phase 1B of the Draft EIS: Following the identification of the recommended over/under location selected, access combinations considered in the SDD will be evaluated to identify the level of access to be retained at 6 existing intersections along the Hwy 252 corridor. Each access combination is a permutation of full access, partial access, and closures, which will be studied in the Draft EIS:

- Access Combination 1—Full access interchanges on Hwy 252 at 85th Avenue, Brookdale Drive, and 66th Avenue. Pedestrian and bicycle access only at Humboldt Avenue, 73rd Avenue and 70th Avenue.
- Access Combination 2—Full access interchanges on Hwy 252 at 85th Avenue and 66th Avenue. Partial access interchanges at Brookdale Drive and 73rd Avenue. Pedestrian and bicycle access only at Humboldt Avenue and 70th Avenue.
- Access Combination 3—Full access interchange on Hwy 252 at 85th Avenue. Partial access interchanges at Brookdale Drive and 73rd Avenue. Pedestrian and bicycle access only at Humboldt Avenue, 70th Avenue and 66th Avenue.
- Access Combination 4—Full access interchanges on Hwy 252 at 85th Avenue, Brookdale Drive, and 70th Avenue. Pedestrian and bicycle access only at Humboldt Avenue, 73rd Avenue and 70th Avenue.
- Access Combination 5—Full access interchanges on Hwy 252 at 85th Avenue and 73rd Avenue. Pedestrian and bicycle access only at Humboldt Avenue, 70th Avenue and 66th Avenue.

Hwy 252 Corridor Elements

Step 4—Phase 2 of the Draft EIS: FHWA and MnDOT are currently considering three corridor elements identified in the SDD on Hwy 252, using the recommended Hwy 252 vertical location and recommended access combination along Hwy 252 as determined in Step 4—Phases 1A and 1B. Three Hwy 252 corridor elements will be combined with applicable I–94 corridor elements to form up to ten whole corridor alternatives (see next section):

- Element 5—Convert Hwy 252 to 4-lane freeway with interchanges with bus-only shoulders.
- Element 6—Convert Hwy 252 to 6-lane freeway with interchanges with bus-only shoulders.
- Element 7—Convert Hwy 252 to 6-lane freeway with two managed lanes.

I–94

Additional details on the criteria used to refine I–94 corridor elements are provided in the SD/DSDD.

I–94 Corridor Elements

Step 4—Phase 2 of the Draft EIS: FHWA and MNDOT are considering 5 corridor elements on I–94 to be combined with the 3 Hwy 252 corridor elements (see previous section) to form up to 10 whole corridor alternatives:

- Element A—No change on I–94
- Element B—Convert one southbound I–94 lane from I–694 to North Fourth Street to a managed lane with a direct connection to downtown Minneapolis.
- Element D—Convert one southbound and one northbound I–94 Lane from I–694 to North Fourth Street to managed lanes with a direct connection to downtown Minneapolis.
- Element G—Build one southbound I–94 Lane from I–694 to Dowling Avenue as a managed lane, convert one southbound I–94 Lane from Dowling Avenue to North Fourth Street to a managed lane with a direct connection to downtown Minneapolis.
- Element J—Build one southbound and one northbound I–94 Lane from I–694 to Dowling Avenue as managed lanes, convert one southbound and one northbound I–94 Lane from Dowling Avenue to North Fourth Street to a managed lane with a direct connection to downtown Minneapolis.

Reasonable Range of Alternatives

In Step 4—Phase 1A, FHWA and MnDOT anticipate evaluating the separation of Hwy 252 over or under the local road at each of the potential interchange locations before proceeding to Step 4—Phase 1B, the evaluation of the 5 Hwy 252 access combinations elements. Incorporating the recommendations from Step 4—Phases 1A and 1B with the Hwy 252 corridor elements, FHWA and MnDOT will proceed to Step 4—Phase 2 and evaluate up to 10 Hwy 252/I–94 corridor alternatives. These 10 corridor alternatives are made up of the three Hwy 252 corridor elements combined with the 5 I–94 corridor elements as identified in Table 7.3 of the SDD. The 10 corridor alternatives are A.5, A.6, B.7, D.7, G.5, G.6, G.7, J.5, J.6 and J.7.

Other Hwy 252 and I–94 Design Considerations

The following list summarizes Hwy 252/I–94 design considerations to be studied further in the Draft EIS. These will be integrated into the Hwy 252/I–94 corridor alternatives.

- Southbound Hwy 252/I–94 lane configuration moved to the right side of I–94 using a bridge south of the Hwy 252/I–94/I–694 system interchange.
- Hwy 252 grade separated overpasses at non-access locations. This will include dedicated pedestrian/bicycle overpass bridges for non-motorized uses (*e.g.,* overpass bridge with trails and/or sidewalks for pedestrians and bicyclists).
- West River Road reconnection on the east side of Hwy 252 in Brooklyn Park.
- I–94 Pedestrian and bicycle overpass at 62nd Avenue, 61st Avenue and 34th Avenue.

Brief Summary of Expected Impacts

The Draft EIS will further refine and evaluate the Alternatives based on how well they address the transportation problems that led to the initiation of the Project. The Draft EIS will then evaluate the potential SEE effects resulting from the implementation of these refined Alternatives and the No Build Alternative. The following are anticipated to be the most sensitive environmental, economic, and social concerns in the Project area and will be evaluated in detail by MnDOT and FHWA:

- *Environmental Justice:* There is the potential for impacts to environmental justice (EJ) communities (low-income, minority) due to right-of-way requirements, increases in noise, or other environmental factors. Based on the demographic data collection conducted during the scoping phase, there are identifiable EJ populations in the Project study area for the Project. FHWA and MnDOT will work with the community to avoid, minimize, and mitigate these impacts.
- *Wetlands and other aquatic resources:* MnDOT completed a Level 2 wetland delineation along Hwy 252 and I–94 in 2018 which identified 4 wetlands, 12 wet ditches, and 18 other aquatic resources within highway right of way. The Draft EIS will include additional wetland information for portions of Project alternatives beyond the existing highway right of way. Supplemental wetland delineations will be prepared as necessary. The Mississippi River impact review will also need coordination with the U.S. Army Corps of Engineers (USACE), Minnesota Department of Natural Resources, and Board of Soil and Water Resources and will occur as part of the Draft EIS.
- *Right-of-way acquisitions and relocations:* Build alternatives would require a varying number of property acquisitions and relocations. MnDOT and FHWA will work with the impacted stakeholders and designers to minimize the number of impacted parcels. Access combinations alternatives have the greatest number of impacts to right of way. MnDOT will work with the cities of Brooklyn Center and Brooklyn Park to evaluate property impacts versus the benefits received with each alternative.
- *Air Quality:* MnDOT convened an air quality working group during the EA phase of the Project which includes staff from FHWA, MnDOT, Hennepin County, Minnesota Pollution Control Agency, and Minnesota Department of Health. Coordination with the air quality working group will be reconvened as part of the Draft EIS.
- *Noise:* An analysis of potential noise impacts to noise-sensitive receptors will be conducted. The addition of interchanges and the anticipated increase in traffic volumes indicate that properties near the corridor could experience elevated noise levels.

In addition to the known resources above, the Draft EIS will also identify impacts to the following resources, as identified in SDD Chapter 9:

- *Accessibility*
- *Active Transportation (Walking, Biking, Rolling)*
- *Critical Areas (Mississippi River Corridor Critical Area and Mississippi National River and Recreation Area)*
- *Cultural Resources*
- *Cumulative Effects*
- *Economic and Business Impacts*
- *Erosion Control and Slope Stability*
- *Excess Material*
- *Fish and Wildlife*
- *Floodplains*
- *Geotechnical and Earthborne Vibrations*
- *Greenhouse Gas Analysis disclosure only for preferred alternative*
- *Hazardous Materials, Contaminated Properties*
- *Indirect Impacts*
- *Irreversible and Irretrievable Commitment of Resources*
- *Land use*
- *Relationship of Local Short-Term Uses Versus Long-Term Productivity*
- *Social and Neighborhood Impacts*
- *Utilities*
- *Visual Quality*
- *Intermodal Transportation*
- *Traffic Safety*
- *Traffic Operations*
- *Transit*
- *Vegetation/Cover Types*
- *Threatened and Endangered Species*
- *Historic and archaeological sites*
- *Section 4(f) properties*
- *Hazardous Waste Sites*

The level of review of the identified resources for the EIS will be commensurate with the anticipated effects to each resource from the proposed Project and will be governed by the statutory or regulatory requirements protecting those resources.

The analyses and evaluations conducted for the EIS will identify the potential for effects; avoidance measures; minimization measures; whether the anticipated effects would be adverse; and mitigation measures for adverse effects. Additional information on the expected impacts is provided in the Project SD/DSDD and SDD available for review on the Project website as noted in the **ADDRESSES** section of this Notice. Comments on the expected impacts to be analyzed in the Draft EIS are welcomed during the NOI comment period.

Agencies, stakeholders, and the public are invited to comment on the anticipated impacts. The environmental impact analysis will be developed once the Alternatives for Study in the Draft EIS and impact categories are refined based on substantive public comment on this notice. The identification of impacts may be amended due to the consideration of public comments. See the SD/SDD and SDD for a more detailed description of the issues requiring analysis in the EIS. The studies to identify the impacts, as well as the analyses of impacts from the retained alternatives, will be presented in the Draft EIS.

Anticipated Permits and Other Authorizations

FHWA, in consultation with MnDOT and Cooperating and Participating Agencies, will develop a schedule, or Permitting Timetable, for the Project. The Permitting Timetable will identify actions and associated milestones for the environmental review process and subsequent agency authorizations. Resource agencies are currently reviewing the Permitting Timetable. The Draft EIS will include the Permitting Timetable. FHWA and MnDOT will coordinate with agencies throughout the project development process for Hwy 252/I–94 to make updates to the Permitting Timetable as appropriate. The SDD Chapter 11 provides additional information regarding the permits anticipated to be needed for the Project. A Section 404 permit with the USACE for impacts to wetlands is the one anticipated federal permit.

Per 23 U.S.C. 139(d)(10), the aforementioned permits and authorizations are typically anticipated to be completed by no later than 90 days after the issuance of the Record of Decision (ROD). However, for this Project, in accordance with 23 U.S.C. 139(d)(10)(C)(ii) FHWA has approved MnDOT's request that those permits and authorizations follow a different timeline because the construction start date is not expected until 2028 or later.

Scoping and Public Review

The following sections outline agency coordination and public engagement processes supporting the Project.

Local Agency Coordination

For the Hwy 252/I–94 EIS, MnDOT and FHWA are the joint lead agencies for the NEPA process and MnDOT is the lead agency for the MEPA process. MnDOT and FHWA will seek input and collaborate with partner agencies throughout the EIS process. Local agency coordination includes involvement with the Technical Advisory Committee (TAC) and Engagement Committee:

- The TAC includes staff from Hennepin County, City of Brooklyn Park, City of Brooklyn Center, City of Minneapolis, MnDOT, FHWA, Metropolitan Council, Metro Transit, and Project Consultants. The TAC meets approximately monthly to provide leadership and guidance for resolution of technical issues, to provide input on public engagement activities and materials, and to provide recommendations to the Policy Advisory Committee (PAC).
- The Engagement Committee is comprised of public engagement staff from MnDOT and partnering agencies. The Engagement Committee advises MnDOT and the Project consultants on engagement strategy, techniques, and key audiences. It reviews engagement materials and furthers the Project's messages across their platforms. The Engagement Committee meets approximately monthly and more often when preparing for and conducting engagement activities.

Cooperating and Participating Agencies

As part of the scoping phase, MnDOT and FHWA identified and invited agencies who would like to serve as Participating and Cooperating Agencies for the Project. Cooperating Agencies are those that have ''jurisdiction by law or special expertise''—those that are anticipated to issue permits or approvals for the Project. Participating Agencies are all agencies ''with an interest'' in the Project—these may include Federal, State, or local agencies. MnDOT and FHWA have prepared an Agency Coordination Plan that will guide FHWA's and MnDOT's interactions with Cooperating and Participating Agencies for the Project. The Agency Coordination Plan describes agency roles and responsibilities, agency expectations, concurrence points, and Project milestones. The Agency Coordination Plan is a living document that is anticipated to evolve over the lifetime of the Hwy 252/I–94 environmental review process. Cooperating and Participating Agency roles are summarized in the SDD.

MnDOT and FHWA followed a merged scoping process to comply with MEPA and NEPA requirements as outlined in Figure 1.1 in the SD/DSDD. Ten Cooperating and Participating Agency meetings have been held to this point during the State and Federal scoping process. The focus of these meetings was to provide Project updates, review Project deliverables, and to collect input from agency representatives. Cooperating and Participating Agency meetings will be on-going through development of the Draft EIS and Final EIS/ROD.

Policy Advisory Committee

The PAC includes elected and appointed officials from MnDOT, State of Minnesota, FHWA, Hennepin County, City of Brooklyn Park, City of Brooklyn Center, City of Minneapolis, and Metropolitan Council. The PAC meets approximately quarterly, and meetings are open to the public. The PAC is not a decision-making body. The roles of the PAC include:

- Guide policy and funding decisions pertaining to the Project.
- Review recommendations from the TAC and provide input on public engagement materials.
- Provide help in identifying important community issues.
- Provide help in communicating with neighboring constituents on Project decision points/major milestones and encourage public participation.
- Provide input as requested by MnDOT.

Beyond their role on the PAC, elected leaders from the cities of Brooklyn Park, Brooklyn Center, and Minneapolis; Hennepin County; and the State will be included in public engagement communications and events.

Public Engagement

EA Phase Engagement

Hennepin County, MnDOT, and Project partners completed three rounds of public engagement in Summer 2018, Winter 2018, and Summer 2019. These rounds of engagement included community workshops, listening sessions, pop-up events, and online surveys. The outcome of the EA phase was a determination by MnDOT and FHWA that the complexity and magnitude of the proposed action for Hwy 252 and I–94 demonstrated prudence to transition to an EIS as the appropriate NEPA class of action.

Scoping Phase Engagement

MnDOT hosted 3 rounds of public engagement during the state and federal scoping process from Spring 2021 through Spring 2023. Public engagement activities included listening sessions, pop-up events, virtual public meetings and community conversations, and in-person open house meetings. More than 830 public comments were submitted during the scoping period.

Comments received reflected preferences for individual alternatives, identified potential Project impacts and expressed related concerns, or suggested variations (*e.g.,* to keep or add additional alternatives). Throughout the scoping process, the Project team used public comments to help identify, develop, and evaluate alternatives. The SDD provides additional information on these engagement activities and outcomes.

Equity and Health Assessment

MnDOT's Sustainability and Public Health Office and MnDOT Metro District conducted an Equity Health Assessment (EHA) of the Project. MnDOT initiated the Hwy 252/I–94 EHA in 2021 as enhanced engagement to pilot a new method for including equity and health information in the environmental review process. The EHA draws from principles and practices of Health Impact Assessment and Community Impact Assessment tools used by public agencies across the country to understand and address equity and health impacts on transportation projects.

During MEPA scoping, MnDOT facilitated the EHA process to help organize and bring forward the equity and health priorities of underserved and overburdened populations. The EHA input provided will be considered during the NEPA and MEPA processes the same as other public comment or feedback. Additional details on the outcomes of this assessment are provided in the Project SDD.

Engagement During the Environmental Process

MnDOT and FHWA have prepared a Public Engagement Plan as well as an Agency Coordination Plan for the Project which is available on the Project website at *www.dot.state.mn.us/metro/projects/hwy252study/index.html.* The purpose of the Public Engagement Plan is to communicate the engagement strategy during the four phases of the Project (*e.g.,* Purpose and Need Statement, Scoping, Draft EIS, and Final EIS). The Public Engagement Plan identifies the priorities, goals, strategies, messages, and action steps for engaging the public in each phase of the EIS process. The Public Engagement Plan notes the NEPA- and MEPA-required milestones and integrates them into the overall engagement strategy. As engagement occurred during scoping, the Project team responded to the needs and requests of the communities. Any changes in public engagement strategies were guided by the Public Engagement Plan and informed by what the Project team was hearing from the public. The Public Engagement Plan is a living document that is anticipated to evolve over the lifetime of the environmental review process. The public engagement vision for the Project is listed below:

MnDOT, FHWA, and their partners will anticipate and respond to public, stakeholder, and agency engagement needs to facilitate two-way communications that effectively and efficiently navigates the environmental review process, building broad Project understanding along the way.

A Schedule for the Decision-Making Process

Following the issuance of this notice, FHWA and MnDOT will coordinate with the Participating and Cooperating Agencies to confirm study methodologies and analyze Project effects for inclusion in the Draft EIS.

This Project is subject to 23 U.S.C. 139(g)(1)(B)(iii) such that the schedule is consistent with an agency average of not more than two years for completion of the environmental review process, as measured from the date of the publication of the NOI to the ROD. The public engagement plan, agency coordination plan and schedule, developed with input from cooperating and participating agencies and the public, targets 2 years from the NOI to the ROD. In the event it becomes apparent to FHWA during Project development that the schedule from NOI to ROD would be more than 2 years, FHWA may seek a modification to lengthen the schedule in accordance with 23 U.S.C. 139(g)(1)(D).

- The target date for the Draft EIS is early 2026.
- A public hearing will be held during the Draft EIS 45-day public comment period.
- The target date for the combined Final EIS and ROD is April 2026.
- A Section 404 permit decision from the USACE is expected in 2028, dependent on the timing of final design and construction. See the SDD for additional schedule details.

Request for Identification of Potential Alternatives, Information, and Analyses Relevant to the Proposed Action

To confirm that a full range of transportation issues related to the study will be addressed and potential issues are identified, FHWA invites comments and suggestions from all interested parties. The Project team requests comments and suggestions on the potential alternatives and associated impacts, and the identification of relevant information, studies, or analyses concerning impacts affecting the quality of the human environment not previously identified during the scoping phase. The purpose of this request is to bring additional relevant comments, information, and analyses to the agency's attention, to enable the agency to make maximum use of this additional information in the decision-making process. Comments may be submitted according to the instructions in the **ADDRESSES** section of this Notice. Comments must be received by May 15, 2024.

Authority: 42 U.S.C. 4321 *et seq.;* 23 U.S.C. 139; 23 CFR part 771.

Susan M. Wimberly,

Deputy Division Administrator, FHWA Minnesota Division, St. Paul, Minnesota.

[FR Doc. 2024–07709 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–22–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2023–0182]

Agency Information Collection Activities; Renewal of a Currently Approved Information Collection: Generic Clearance of Customer Satisfaction Surveys

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).

ACTION: Notice and request for comments.

SUMMARY: In accordance with the Paperwork Reduction Act of 1995, FMCSA announces its plan to submit the Information Collection Request (ICR) described below to the Office of Management and Budget (OMB) for review and approval. In order to work continuously to ensure that our programs are effective and meet our customers' needs, FMCSA requests approval to renew an ICR titled, ''Generic Clearance of Customer Satisfaction Surveys.'' This ICR allows

FMCSA to continue collecting feedback on our service delivery. By feedback, we mean information that provides useful insights on perceptions and opinions but are not statistical surveys that yield quantitative results that can be generalized to the population of study.

DATES: Comments on this notice must be received on or before May 15, 2024.

ADDRESSES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function.

FOR FURTHER INFORMATION CONTACT: Ms. Roxane Oliver, FMCSA, Office of Analysis, DOT, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590, (202) 385–2324, *Roxane.Oliver@dot.gov.*

SUPPLEMENTARY INFORMATION:

Title: Generic Clearance of Customer Satisfaction Surveys.

OMB Control Number: 2126–0061.

Type of Request: Renewal of currently approved collection.

Respondents: State and local agencies, general public and stakeholders; original equipment manufacturers and suppliers to the commercial motor vehicle (CMV) industry; fleets, owner-operators, state CMV safety agencies, research organizations and contractors; news organizations and safety advocacy groups.

Estimated Number of Respondents: 5,900 (5,000 customer satisfaction survey respondents + 100 listening sessions/stakeholder feedback forums respondents + 300 focus group respondents + 500 strategic planning customer satisfaction survey respondents).

Estimated Time per Response: Range from 10 to 120 minutes.

Expiration Date: July 31, 2024.

Frequency of Response: Generally, on an annual basis.

Estimated Total Annual Burden: 1,758 hours (833 hours for customer satisfaction surveys + 200 hours for listening sessions/stakeholder feedback forums + 600 hours for focus groups + 125 hours for strategic planning customer satisfaction surveys).

Background

Executive Order (E.O.) 12862, Setting Customer Service Standards, requires the Federal government to provide the ''highest quality service possible to the American people.'' E.O. 13571, Streamlining Service Delivery and Improving Customer Service, requires the standard of quality for services provided to the public to be customer service equal to the best in business. In order to work continuously to ensure that our programs are effective and meet our customers' needs, FMCSA seeks to renew OMB's approval of a generic clearance to collect qualitative feedback from our customers on our service delivery. The surveys covered in this generic clearance provide a means for FMCSA to collect this data directly from our customers. By qualitative feedback, we mean information that provides useful insights on perceptions and opinions but are not generated from statistical surveys that yield quantitative results that can be generalized to the population of study. This feedback provides insights into customer or stakeholder perceptions, experiences, and expectations, provides an early warning of issues with service, or focuses attention on areas of communication, training, or changes in operations that might improve delivery of products or services. These collections allow for ongoing, collaborative, and actionable communications between the Agency and its customers and stakeholders. They also allow feedback to contribute directly to the improvement of program management.

The solicitation of feedback targets areas such as: timeliness, appropriateness, accuracy of information, courtesy, efficiency of service delivery, and resolution of issues with service delivery. Responses are assessed to plan and inform efforts to improve or maintain the quality of service offered to the public. If this information is not collected, vital feedback from customers and stakeholders on the Agency's services will be unavailable.

The Agency will submit a planned collection for approval under this generic clearance only if it meets the conditions that such collections are:

- voluntary;
- low-burden for respondents (based on considerations of total burden hours, total number of respondents, or burden hours per respondent) and are low-cost for both the respondents and the Federal government;
- noncontroversial and do not raise issues of concern to other Federal Agencies;
- targeted to the solicitation of opinions from respondents who have experience with the program or may have experience with the program in the near future;
- only collecting personally identifiable information (PII) to the extent necessary and not retaining it;
- only collecting information intended to be used only internally for general service improvement and program management, and any release outside the Agency must indicate the qualitative nature of the information;
- not to be used for the purpose of substantially informing influential policy decisions; and
- intended to yield only qualitative information.

This type of generic clearance for qualitative information will not be used for quantitative information collections that are designed to yield reliably actionable results, such as monitoring trends over time or documenting program performance. Such data uses require more rigorous designs that address: the target population to which generalizations will be made; the sampling frame; the sample design (including stratification and clustering); the precision requirements or power calculations that justify the proposed sample size; the expected response rate; methods for assessing potential nonresponse bias; the protocols for data collection; and any testing procedures that were or will be undertaken prior to fielding the study. Depending on the degree of influence the results are likely to have, such collections may still be eligible for submission for other mechanisms that are designed to yield quantitative results. As a general matter, information collections will not result in any new system of records containing privacy information and will not ask questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

Public Comments Invited: You are asked to comment on any aspect of this information collection, including: (1) whether the proposed collection is necessary for the performance of FMCSA's functions; (2) the accuracy of the estimated burden; (3) ways for FMCSA to enhance the quality, usefulness, and clarity of the collected information; and (4) ways that the burden could be minimized without reducing the quality of the collected information.

Issued under the authority of 49 CFR 1.87.

Thomas P. Keane,

Associate Administrator, Office of Research and Registration.

[FR Doc. 2024–07891 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2024–0101]

Parts and Accessories Necessary for Safe Operation; Application for an Exemption From K & L Trucking

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).

ACTION: Notice of application for exemption; request for comments.

SUMMARY: The Federal Motor Carrier Safety Administration (FMCSA) requests public comment on an exemption application to allow K & L Trucking (K & L) to transport metal coils using a single two-ply nylon-Kevlar tie down strap to secure its metal coils for transport to a metal coil carrier affixed to the bed of its trucks/trailers as an alternative to the requirements in current regulations. K & L states that its method of securing steel coils is a safe alternative to the method required in the FMCSRs for the short distance that each load is transported. K & L believes the exemption would maintain a level of safety that is equivalent to, or greater than, the level of safety achieved without the exemption.

DATES: Comments must be received on or before May 15, 2024.

ADDRESSES: You may submit comments identified by docket number FMCSA–2024–0101 using any of the following methods:

- *Federal eRulemaking Portal:* Go to *https://www.regulations.gov/docket/FMCSA-2023-0201/document.* Follow the online instructions for submitting comments.
- *Mail:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Washington, DC 20590–0001, between 9 a.m. and 5 p.m. ET, Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

FOR FURTHER INFORMATION CONTACT: Mr. David Sutula, Vehicle and Roadside Operations Division, Office of Carrier, Driver, and Vehicle Safety, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, (202) 366–5541, *MCPSV@dot.gov.* If you have questions on viewing or submitting material to the docket, call Dockets Operations at (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

A. Submitting Comments

If you submit a comment, please include the docket number for this notice (Docket No. FMCSA–2024–0101), indicate the specific section of this document to which your comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so that FMCSA can contact you if it has questions regarding your submission.

To submit your comment online, go to *http://www.regulations.gov/docket/FMCSA-2024-0101/document*, click on this notice, click ''Comment,'' and type your comment into the text box on the following screen.

If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing.

FMCSA will consider all comments and material received during the comment period. Comments received after the comment closing date will be filed in the public docket and will be considered to the extent practicable.

B. Confidential Business Information (CBI)

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to the notice contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to the notice, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission that constitutes CBI as ''PROPIN'' to indicate it contains proprietary information. FMCSA will treat such marked submissions as confidential under the Freedom of Information Act, and they will not be placed in the public docket of the notice. Submissions containing CBI should be sent to Brian Dahlin, Chief, Regulatory Evaluation Division, Office of Policy, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 or via email at *brian.g.dahlin@dot.gov.* At this time, you need not send a duplicate hardcopy of your electronic CBI submissions to FMCSA headquarters. Any comments FMCSA receives not specifically designated as CBI will be placed in the public docket for this notice.

C. Viewing Comments and Documents

To view comments, as well as any documents mentioned in this preamble as being available in the docket, go to *https://www.regulations.gov/docket/FMCSA-2024-0101/document* and choose the document to review. To view comments, click this notice, then click ''Browse Comments.'' If you do not have access to the internet, you may view the docket online by visiting Docket Operations on the ground floor of the DOT West Building, 1200 New Jersey Avenue SE, Washington, DC 20590–0001, between 9 a.m. and 5 p.m., ET Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

D. Privacy

In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its regulatory process. DOT posts these comments, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice DOT/ALL 14 (Federal Docket Management System (FDMS)), which can be reviewed under the ''Department Wide System of Records Notices'' at *https://www.transportation.gov/individuals/privacy/privacy-act-system-records-notices.* The comments are posted without edit and are searchable by the name of the submitter.

II. Legal Basis

FMCSA has authority under 49 U.S.C. 31136(e) and 31315(b) to grant exemptions from the FMCSRs. FMCSA must publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)). The Agency must provide the public an opportunity to inspect the information relevant to the application, including the applicant's safety analysis. The Agency must provide an opportunity for public comment on the request.

The Agency reviews safety analyses and public comments submitted and determines whether granting the exemption would likely maintain a level of safety equivalent to, or greater than, the level that would be achieved by the current regulation (§ 381.305(a)). The Agency must publish its decision in the

Federal Register (§ 381.315(b)). If granted, the notice will identify the regulatory provision from which the applicant will be exempt, the effective period, and all terms and conditions of the exemption (§ 381.315(c)(1)). If the exemption is denied, the notice will explain the reason for the denial (§ 381.315(c)(2)). The exemption may be renewed (§ 381.300(b)).

III. K & L Trucking Application for Exemption

On December 4, 2020, FMCSA granted a 5-year exemption from the coil securement rules in section 393.130(c) to allow K & L to use the alternative securement method described below to transport coils from North Star Blue Scope Steel to Fulton County Processing (85 FR 78406). K & L has now applied to expand the exemption to transportation to and from other points within a few miles of each other. The exemption would allow the use of a specialized metal coil carrier permanently attached to the flatbed trailer using sixteen 5/8-inch Grade 8 bolts each rated to hold 27,611 pounds. The coil carrier serves to distribute the coil's weight while securing the coil and preventing rolling during transport. Rather than using the four chains required by section 393.120(c) to prevent the coil from moving forwards or backwards, K & L uses a large single 2 ply synthetic strap with Kevlar protective coating rated with a working load limit of 44,800 pounds routed through the eye of the coil and securing each coil to the coil carrier. A copy of the application is included in the docket referenced at the beginning of this notice.

The exemption would apply to all K & L employees driving commercial motor vehicles utilizing this specialized cargo securement technique transporting metal coils less than 4 miles to and from North Star Blue Scope Steel, LLC, located at 6767 Co. Rd. 9 (and its scales located at Co. Rd. 10), Delta, OH 43515; Fulton County Processing, located at 7800 OH–109, Delta, OH 43515; Worthington Industries, located at 6303 Co. Rd. 10, Delta, OH 43515; Nova Tube and Steel located at 8641 Co. Rd. H, Delta, OH 43515; and BlueScope Recycling and Materials, located at 7300 OH–109, Delta, OH 43515. K & L Trucking believes that its steel coil cargo securement system, as described, would maintain a level of safety that is equivalent to, or greater than, the level of safety achieved without the exemption.

IV. Request for Comments

In accordance with 49 U.S.C. 31315(b)(6), FMCSA requests public comment from all interested persons on K & L's application for an exemption from 49 CFR 393.120(c). All comments received before the close of business on the comment closing date indicated at the beginning of this notice will be considered and will be available for examination in the docket at the location listed under the **ADDRESSES** section of this notice. Comments received after the comment closing date will be filed in the public docket and will be considered to the extent practicable. In addition to late comments, FMCSA will also continue to file, in the public docket, relevant information that becomes available after the comment closing date. Interested persons should continue to examine the public docket for new material.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2024–07892 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

Federal Motor Carrier Safety Administration

[Docket No. FMCSA–2023–0272]

Commercial Driver's License: State of Hawaii Department of Transportation; Application for Exemption

AGENCY: Federal Motor Carrier Safety Administration (FMCSA), Department of Transportation (DOT).

ACTION: Notice of application for exemption; request for comments.

SUMMARY: FMCSA announces the Hawaii Department of Transportation's (HDOT) requests for an exemption on behalf of the Hawaii Department of Education's (DOE) Transportation Services Branch and independent schools statewide to allow Class A or B commercial driver's license (CDL) holders with a passenger (P) endorsement to operate a school bus without holding a school bus (S) endorsement, and to allow the use of motorcoaches and vans to transport students to/from a central location to school daily. HDOT states that except for the S endorsement training requirements, all other Federal and State training requirements will be completed before drivers start transporting students in motorcoaches. HDOT believes an exemption will provide a temporary resolution to its school bus driver shortage while drivers complete the S endorsement training. FMCSA requests public comment on the applicant's request for exemption.

DATES: Comments must be received on or before May 15, 2024.

ADDRESSES: You may submit comments identified by Federal Docket Management System (FDMS) Number FMCSA–2023–0272 by any of the following methods:

- *Federal eRulemaking Portal: www.regulations.gov.* See the Public Participation and Request for Comments section below for further information.
- *Mail:* Dockets Operations, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Washington, DC 20590–0001.
- *Hand Delivery or Courier:* West Building, Ground Floor, 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m. E.T., Monday through Friday, except Federal holidays.
- *Fax:* (202) 493–2251.

Each submission must include the Agency name and the docket number (FMCSA–2023–0272) for this notice. Note that DOT posts all comments received without change to *www.regulations.gov,* including any personal information included in a comment. Please see the Privacy Act heading below.

Docket: For access to the docket to read background documents or comments, go to *www.regulations.gov* at any time on the ground level of the West Building, 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., ET, Monday through Friday, except Federal holidays. To be sure someone is there to help you, please call (202) 366–9317 or (202) 366–9826 before visiting Dockets Operations.

Privacy Act: In accordance with 49 U.S.C. 31315(b), DOT solicits comments from the public to better inform its exemption process. DOT posts these comments, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice DOT/ALL–14 FDMS, which can be reviewed under the ''Department Wide System of Records Notices'' link at *https://www.transportation.gov/individuals/privacy/privacy-act-system-records-notices.* The comments are posted without edit and are searchable by the name of the submitter.

FOR FURTHER INFORMATION CONTACT: Mr. Richard Clemente, Driver and Carrier Operations Division; Office of Carrier, Driver and Vehicle Safety Standards, FMCSA; (202) 366–2722; *richard.clemente@dot.gov.* If you have questions on viewing or submitting

material to the docket, contact Dockets Operations at (202) 366–9826.

SUPPLEMENTARY INFORMATION:

I. Public Participation and Request for Comments

FMCSA encourages you to participate by submitting comments and related materials.

Submitting Comments

If you submit a comment, please include the docket number for this notice (FMCSA–2023–0272), indicate the specific section of this document to which the comment applies, and provide a reason for your suggestions or recommendations. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. FMCSA recommends that you include your name and a mailing address, an email address, or a phone number in the body of your document so the Agency can contact you if it has questions regarding your submission.

To submit your comment online, go to *www.regulations.gov* and put the docket number ''FMCSA–2023–0272'' in the keyword box, and click ''Search.'' Next, sort the results by ''Posted (Newer-Older),'' choose the first notice listed, click the ''Comment'' button, and type your comment into the text box on the following screen. Choose whether you are submitting your comment as an individual or on behalf of a third party and then submit. If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the facility, please enclose a stamped, self-addressed postcard or envelope. FMCSA will consider all comments and material received during the comment period.

Confidential Business Information (CBI)

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to the notice contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to the notice, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission that constitutes CBI as ''PROPIN'' to indicate it contains proprietary information. FMCSA will treat such marked submissions as confidential under the Freedom of Information Act, and they will not be placed in the public docket of the notice. Submissions containing CBI should be sent to Brian Dahlin, Chief, Regulatory Evaluation Division, Office of Policy, FMCSA, 1200 New Jersey Avenue SE, Washington, DC 20590–0001 or via email at *brian.g.dahlin@dot.gov.* At this time, you need not send a duplicate hardcopy of your electronic CBI submissions to FMCSA headquarters. Any comments FMCSA receives not specifically designated as CBI will be placed in the public docket for this notice.

II. Legal Basis

FMCSA has authority under 49 U.S.C. 31136(e) and 31315(b) to grant exemptions from Federal Motor Carrier Safety Regulations (FMCSRs). FMCSA must publish a notice of each exemption request in the **Federal Register** (49 CFR 381.315(a)). The Agency must provide the public an opportunity to inspect the information relevant to the application, including any safety analyses that have been conducted. The Agency must provide an opportunity for public comment on the request.

The Agency reviews safety analyses and public comments submitted and determines whether granting the exemption would likely achieve a level of safety equivalent to, or greater than, the level that would be achieved by the current regulation (49 CFR 381.305(a)). The Agency must publish its decision in the **Federal Register** (49 CFR 381.315(b)). If granted, the notice will identify the regulatory provision from which the applicant will be exempt, the effective period, and all terms and conditions of the exemption (49 CFR 381.315(c)(1)). If the exemption is denied, the notice will explain the reason for the denial (49 CFR 381.315(c)(2)). The exemption may be renewed (49 CFR 381.300(b)).

III. Applicant's Request

HDOT seeks relief from the commercial driver's license (CDL) and commercial learner's permit (CLP) regulations in 49 CFR part 383 for the following: to allow Class A or B CDL holders with a P endorsement to operate a school bus without holding an S endorsement CLP, and to allow the use of motorcoaches and vans to transport students to/from a central location to school on a daily basis.[1] [2] HDOT is working with DOE and independent schools statewide to provide alternative transportation solutions to increase the number of students who can attend school in-person.

HDOT is requesting relief, so that Class A and Class B drivers who have a P endorsement may operate traditional school buses in a school bus operation, without the required S endorsement. HDOT is also requesting the same relief for Class A and Class B drivers who operate motorcoaches or vans to transport students from a central location to school and from school to a central location on a daily basis. Hawaii currently has a severe shortage of school bus drivers, and as a result, the DOE had to reduce services to public school students who do not have transportation to/from school. This reduction of services statewide has impacted the number of students who can attend school in person, especially in rural areas. The shortage has forced a suspension or partial suspension on the islands of Oahu and Kauai, and the route suspensions and partial suspensions will last the entire 2023–2024 school year.

HDOT indicates that with the exception of the S endorsement, all other Federal and State training requirements will be completed prior to the drivers starting motorcoach service. Drivers will be in the process of completing their S endorsements, and therefore HDOT anticipates that the remaining requirement will be met within a reasonable time frame. The DOE will continue to accept responsibility for the initial screening and proficiency of all drivers allowed to provide bus service for students.

A copy of HDOT's application for exemption is available for review in the docket for this notice.

IV. Request for Comments

In accordance with 49 U.S.C. 31315(b), FMCSA requests public comment from all interested persons on HDOT's application for an exemption, so that a Class A or B CDL holder with a P endorsement may operate a school

[1] HDOT's letter requested a waiver to ''immediately address the driver shortage.'' However, waivers provide only temporary relief for up to three months. In response, FMCSA is also treating the letter as a request for an exemption and seeking public comments.

[2] HDOT's application also included a request to be relieved from the S endorsement requirements to allow drivers with a Class 3 driver's license to temporarily transport students to/from school in smaller vehicles such as vans. The Agency has determined that HDOT does not need an exemption to transport students in these non-CDL vehicles because, to the extent they fall within the definition of school bus and school bus operation, they are excepted from regulation under subchapter B of the Federal Motor Carrier Safety Regulations except for the restrictions on driving while texting, using a hand-held phone, and driving while in prohibited status. Therefore, an exemption allowing the non-CDL Class 3 vehicles to transport students to and from school is unnecessary.

bus without holding an S endorsement. All comments received before the close of business on the comment closing date indicated at the beginning of this notice will be considered and will be available for examination in the docket at the location listed under the Addresses section of this notice. Comments received after the comment closing date will be filed in the public docket and will be considered to the extent practicable. In addition to late comments, FMCSA will also continue to file, in the public docket, relevant information that becomes available after the comment closing date. Interested persons should continue to examine the public docket for new material.

Larry W. Minor,

Associate Administrator for Policy.

[FR Doc. 2024–07901 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–EX–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[DOT–NHTSA–2023–0034]

National Emergency Medical Services Advisory Council Notice of Public Meeting

AGENCY: National Highway Traffic Safety Administration, Department of Transportation (DOT).

ACTION: Notice of public meeting.

SUMMARY: This notice announces a meeting of the National Emergency Medical Services Advisory Council (NEMSAC).

DATES: This meeting will be held in-person and simultaneously transmitted via virtual interface. It will be held on May 1–2, 2024, from 12:00 p.m. to 5:00 p.m. ET. Pre-registration is required to attend this meeting. Once registered, a link permitting access to the meeting will be distributed to registrants by email. If you wish to speak during the meeting, you must submit a written copy of your remarks to DOT by April 17, 2024.

ADDRESSES: General information about the Council is available on the NEMSAC internet website at *www.ems.gov.* The registration portal and meeting agenda will be available on the NEMSAC internet website at *www.ems.gov* at least one week in advance of the meeting.

FOR FURTHER INFORMATION CONTACT: Clary Mole, EMS Specialist, National Highway Traffic Safety Administration, U.S. Department of Transportation is available by phone at (202) 868–3275 or by email at *Clary.Mole@dot.gov.* Any committee-related requests should be sent to the person listed in this section.

SUPPLEMENTARY INFORMATION:

I. Background

NEMSAC is authorized under section 31108 of the Moving Ahead for Progress in the 21st Century (MAP–21) Act of 2012, codified at 42 U.S.C. 300d–4 as a Federal Advisory Committee. The purpose of NEMSAC is to serve as a nationally recognized council of emergency medical services (EMS) representatives to provide advice and consult with:

a. The Federal Interagency Committee on Emergency Medical Services (FICEMS) on matters relating to EMS issues; and

b. The Secretary of Transportation on matters relating to EMS issues affecting DOT.

NEMSAC provides an important national forum for the non-Federal deliberation of national EMS issues and serves as a platform for advice on DOT's national EMS activities. NEMSAC also provides advice and recommendations to the FICEMS.

II. Agenda

At the meeting, the agenda will cover the following topics:

- Informational sessions
- Updates on NHTSA Initiatives
- Subcommittee Reports on Advisory Statuses
- Strategic Planning

III. Public Participation

This meeting will be open to the public. We are committed to providing equal access to this meeting for all participants. Persons with disabilities in need of an accommodation should send a request to the individual in the **FOR FURTHER INFORMATION CONTACT** section of this notice no later than April 17, 2024.

A period of time will be allotted for comments from members of the public joining the meeting. Members of the public may present questions and comments to the Council using the live chat feature available during the meeting. Members of the public may also submit materials, questions, and comments in advance to the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this notice.

Members of the public wishing to reserve time to speak directly to the Council during the meeting must submit a request. The request must include the name, contact information (address, phone number, and email address), and organizational affiliation of the individual wishing to address NEMSAC; it must also include a written copy of prepared remarks and must be forwarded to the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this notice no later than April 17, 2024.

All advance submissions will be reviewed by the Council Chairperson and Designated Federal Officer. If approved, advance submissions shall be circulated to NEMSAC representatives for review prior to the meeting. All advance submissions will become part of the official record of the meeting.

Authority: 42 U.S.C. 300d–4(b); 49 CFR part 1.95(i)(4).

Issued in Washington, DC.

Nanda Narayanan Srinivasan,

Associate Administrator, Research and Program Development.

[FR Doc. 2024–07837 Filed 4–12–24; 8:45 am]

BILLING CODE 4910–59–P

DEPARTMENT OF THE TREASURY

Internal Revenue Service

Internal Revenue Service Advisory Council; Meeting

AGENCY: Internal Revenue Service, Department of Treasury.

ACTION: Notice of meeting.

SUMMARY: The Internal Revenue Service Advisory Council will hold a public meeting.

DATES: The meeting will be held Wednesday, May 8, 2024.

ADDRESSES: The meeting will be held virtually.

FOR FURTHER INFORMATION CONTACT: Ms. Anna Millikan, Office of National Public Liaison, at 202–317–6564 or send an email to *PublicLiaison@irs.gov.*

SUPPLEMENTARY INFORMATION: Notice is hereby given pursuant to 5 U.S.C. 10(a)(2) of the Federal Advisory Committee Act, that a public meeting of the Internal Revenue Service Advisory Council (IRSAC) will be held on Wednesday, May 8, 2024, to discuss topics that may be recommended for inclusion in a future report of the Council. The virtual meeting will take place at 3:00 p.m. Eastern Time.

To confirm your attendance, members of the public may contact Anna Millikan at 202–317–6564 or send an email to *PublicLiaison@irs.gov.* Attendees are encouraged to join at least five minutes before the meeting begins.

Should you wish the IRSAC to consider a written statement germane to the Council's work, please call 202–317–6564 or email *PublicLiaison@irs.gov* by May 6, 2024.

Dated: April 9, 2024.

John A. Lipold,

Designated Federal Official, Office of National Public Liaison, Internal Revenue Service.

[FR Doc. 2024–07833 Filed 4–12–24; 8:45 am]

BILLING CODE 4830–01–P

DEPARTMENT OF THE TREASURY

Debt Management Advisory Committee Meeting

Notice is hereby given, pursuant to 5 U.S.C. App. 2, 10(a)(2), that a meeting will be held at the United States Treasury Department, 15th Street and Pennsylvania Avenue NW, Washington, DC on April 30, 2024, at 9:00 a.m., of the following debt management advisory committee: Treasury Borrowing Advisory Committee.

At this meeting, the Treasury is seeking advice from the Committee on topics related to the economy, financial markets, Treasury financing, and debt management. Following the working session, the Committee will present a written report of its recommendations. The meeting will be closed to the public, pursuant to 5 U.S.C. App. 2, 10(d) and Public Law 103–202, 202(c)(1)(B)(31 U.S.C. 3121 note).

This notice shall constitute my determination, pursuant to the authority placed in heads of agencies by 5 U.S.C. App. 2, 10(d) and vested in me by Treasury Department Order No. 101–05, that the meeting will consist of discussions and debates of the issues presented to the Committee by the Secretary of the Treasury and the making of recommendations of the Committee to the Secretary, pursuant to Public Law 103–202, 202(c)(1)(B).

Thus, this information is exempt from disclosure under that provision and 5 U.S.C. 552b(c)(3)(B). In addition, the meeting is concerned with information that is exempt from disclosure under 5 U.S.C. 552b(c)(9)(A). The public interest requires that such meetings be closed to the public because the Treasury Department requires frank and full advice from representatives of the financial community prior to making its final decisions on major financing operations. Historically, this advice has been offered by debt management advisory committees established by the several major segments of the financial community. When so utilized, such a committee is recognized to be an advisory committee under 5 U.S.C. App. 2, 3.

Although the Treasury's final announcement of financing plans may not reflect the recommendations provided in reports of the Committee, premature disclosure of the Committee's deliberations and reports would be likely to lead to significant financial speculation in the securities market. Thus, this meeting falls within the exemption covered by 5 U.S.C. 552b(c)(9)(A).

The Office of Debt Management is responsible for maintaining records of debt management advisory committee meetings and for providing annual reports setting forth a summary of Committee activities and such other matters as may be informative to the public consistent with the policy of 5 U.S.C. 552(b). The Designated Federal Officer or other responsible agency official who may be contacted for additional information is Fred Pietrangeli, Director for Office of Debt Management (202) 622–1876.

Dated: April 9, 2024.

Frederick E. Pietrangeli,

Director (for Office of Debt Management).

[FR Doc. 2024–07836 Filed 4–12–24; 8:45 am]

BILLING CODE 4810–25–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0390]

Agency Information Collection Activity Under OMB Review: Application of Surviving Spouse or Child for REPS Benefits (Restored Entitlement Program for Survivors)

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and it includes the actual data collection instrument.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Refer to ''OMB Control No. 2900–0390''.

FOR FURTHER INFORMATION CONTACT: Maribel Aponte, Office of Enterprise and Integration, Data Governance Analytics (008), 810 Vermont Ave. NW, Washington, DC 20420, (202) 266–4688 or email *maribel.aponte@va.gov.* Please refer to ''OMB Control No. 2900–0390'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Authority: 38 U.S.C. 5101.

Title: Application of Surviving Spouse or Child for REPS Benefit (Restored Entitlement Program for Survivors).

OMB Control Number: 2900–0390.

Type of Review: Revision of a currently approved collection.

Abstract: VA Form 21P–8924 is primarily used to gather the necessary information to determine a claimant's eligibility for REPS benefits. Respondents are surviving spouses or schoolchildren who are establishing eligibility for REPS benefits. The beneficiary will complete this information collection and return it to the VA by mail or fax. Once the form is received by the VA, the information is reviewed to determine whether the beneficiary will establish entitlement or continued entitlement to REPS benefits. The information on the form is necessary to determine if the applicant meets REPS eligibility criteria. Without this information, determination of entitlement would not be possible. This is a revision of a currently approved collection as the respondent burden has decreased.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 8521 on February 7, 2024, pages 8521 and 8522.

Affected Public: Individuals or households.

Estimated Annual Burden: 14 hours.

Estimated Average Burden per Respondent: 20 minutes.

Frequency of Response: One time.

Estimated Number of Respondents: 44.

By direction of the Secretary.

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–07863 Filed 4–12–24; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0319]

Agency Information Collection Activity Under OMB Review: Fiduciary Agreement

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and it includes the actual data collection instrument.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Refer to ''OMB Control No. 2900–0319.

FOR FURTHER INFORMATION CONTACT: Maribel Aponte, Office of Enterprise and Integration, Data Governance Analytics (008), 810 Vermont Ave. NW, Washington, DC 20420, (202) 266–4688 or email *maribel.aponte@va.gov.* Please refer to ''OMB Control No. 2900–0319'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Authority: 38 U.S.C. 5502.

Title: Fiduciary Agreement.

OMB Control Number: 2900–0319.

Type of Review: Revision of a currently approved collection.

Abstract: VA Form 21P–4703 is primarily used as a legal contract between the VA and a federal fiduciary. The form outlines the roles and responsibilities of the fiduciary concerning the use of VA funds. Without this agreement, disbursement of funds to the fiduciary would not be possible. This is a revision of a currently approved collection as the respondent burden has decreased.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 8279 on February 6, 2024, pages 8279 and 8280.

Affected Public: Individuals or households.

Estimated Annual Burden: 110 hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: One time.

Estimated Number of Respondents: 1,331.

By direction of the Secretary.

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–07854 Filed 4–12–24; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0658]

Agency Information Collection Activity: Lender's Staff Appraisal Reviewer (SAR) Application

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Benefits Administration, Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and it includes the actual data collection instrument.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Refer to ''OMB Control No. 2900–0658.''

FOR FURTHER INFORMATION CONTACT: Maribel Aponte, Office of Enterprise and Integration, Data Governance Analytics (008), 810 Vermont Ave. NW, Washington, DC 20420, (202) 266–4688 or email *maribel.aponte@va.gov.* Please refer to ''OMB Control No. 2900–0658'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Authority: Public Law 104–13; 44 U.S.C. 3501–3521.

Title: Lender's Staff Appraisal Reviewer (SAR) Application (VA Form 26–0785).

OMB Control Number: 2900–0658.

Type of Review: Revision of a currently approved collection.

Abstract: Title 38 U.S.C. 3702(d) authorizes the Department of Veterans Affairs (VA) to establish standards for lenders making automatically guaranteed loans and 38 U.S.C. 3731(f) authorizes VA to establish, in regulation, standards and procedures to authorize a lender to determine the reasonable value of property. VA has implemented this authority through its Lender Appraisal Processing Program (LAPP), codified in 38 CFR 36.4347.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 8523 on Wednesday, February 7, 2024.

Affected Public: Individuals (employees of lenders making applications).

Estimated Annual Burden: 168 hours.

Estimated Average Burden per Respondent: 5 minutes.

Frequency of Response: On occasion.

Estimated Number of Respondents: 2,100 per year.

By direction of the Secretary.

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–07855 Filed 4–12–24; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0510]

Agency Information Collection Activity Under OMB Review: Application for Exclusion of Children's Income

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget

(OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and it includes the actual data collection instrument.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Refer to ''OMB Control No. 2900–0510''.

FOR FURTHER INFORMATION CONTACT: Maribel Aponte, Office of Enterprise and Integration, Data Governance Analytics (008), 810 Vermont Ave. NW, Washington, DC 20420, (202) 266–4688 or email *maribel.aponte@va.gov.* Please refer to ''OMB Control No. 2900–0510'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Authority: 38 U.S.C. 1521(h) and 1541(g).

Title: Application for Exclusion of Children's Income.

OMB Control Number: 2900–0510.

Type of Review: Revision of a currently approved collection.

Abstract: VA Form 21P–0571 is primarily used by VBA to adequately evaluate children's income for possible exclusion from the calculation of total family income.

This is a revision of a currently approved collection as the respondent burden has decreased.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 8277 on February 6, 2024, page 8277.

Affected Public: Individuals or Households.

Estimated Annual Burden: 32.25 hours.

Estimated Average Burden per Respondent: 45 minutes.

Frequency of Response: One time.

Estimated Number of Respondents: 45.

By direction of the Secretary.

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–07860 Filed 4–12–24; 8:45 am]

BILLING CODE 8320–01–P

DEPARTMENT OF VETERANS AFFAIRS

[OMB Control No. 2900–0115]

Agency Information Collection Activity Under OMB Review: Supporting Statement Regarding Marriage

AGENCY: Veterans Benefits Administration, Department of Veterans Affairs.

ACTION: Notice.

SUMMARY: In compliance with the Paperwork Reduction Act (PRA) of 1995, this notice announces that the Veterans Benefits Administration (VBA), Department of Veterans Affairs, will submit the collection of information abstracted below to the Office of Management and Budget (OMB) for review and comment. The PRA submission describes the nature of the information collection and its expected cost and burden and it includes the actual data collection instrument.

DATES: Written comments and recommendations for the proposed information collection should be sent within 30 days of publication of this notice to *www.reginfo.gov/public/do/PRAMain.* Find this particular information collection by selecting ''Currently under 30-day Review—Open for Public Comments'' or by using the search function. Refer to ''OMB Control No. 2900–0115''.

FOR FURTHER INFORMATION CONTACT: Maribel Aponte, Office of Enterprise and Integration, Data Governance Analytics (008), 810 Vermont Ave. NW, Washington, DC 20420, (202) 266–4688 or email *maribel.aponte@va.gov.* Please refer to ''OMB Control No. 2900–0115'' in any correspondence.

SUPPLEMENTARY INFORMATION:

Authority: 38 U.S.C. 103.

Title: Supporting Statement Regarding Marriage, 21P–4171.

OMB Control Number: 2900–0115.

Type of Review: Revision of a currently approved collection.

Abstract: VA Form 21P–4171 is primarily used to collect information from third-parties regarding claimed common-law marriage between Veterans and spouses/surviving spouses. VBA uses the information collected to determine whether the claimed common-law marriage is valid under the law of the place where the parties resided at the time of marriage, or the law of the place where the parties resided when the right to benefits accrued, to comply with 38 CFR 3.1(j) and pay monetary benefits. Without this information, determination of continued entitlement would not be possible. This is a revision with no changes to the form. The burden has not changed since the last approval.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The **Federal Register** Notice with a 60-day comment period soliciting comments on this collection of information was published at 89 FR 8277 on February 6, 2024, pages 8277 and 8278.

Affected Public: Individuals or Households.

Estimated Annual Burden: 792 hours.

Estimated Average Burden per Respondent: 20 minutes.

Frequency of Response: One time.

Estimated Number of Respondents: 2,400.

By direction of the Secretary.

Maribel Aponte,

VA PRA Clearance Officer, Office of Enterprise and Integration, Data Governance Analytics, Department of Veterans Affairs.

[FR Doc. 2024–07862 Filed 4–12–24; 8:45 am]

BILLING CODE 8320–01–P



FEDERAL REGISTER

Vol. 89 Monday,
No. 73 April 15, 2024

Part II

Department of the Treasury

31 CFR Part 33

Department of Health and Human Services

Centers for Medicare & Medicaid Services

42 CFR Part 600

45 CFR Parts 153, 155, and 156

Patient Protection and Affordable Care Act, HHS Notice of Benefit and Payment Parameters for 2025; Updating Section 1332 Waiver Public Notice Procedures; Medicaid; Consumer Operated and Oriented Plan (CO–OP) Program; and Basic Health Program; Final Rule

DEPARTMENT OF THE TREASURY

31 CFR Part 33

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Part 600

Office of the Secretary

45 CFR Parts 153, 155, and 156

[CMS–9895–F]

RIN 0938–AV22

Patient Protection and Affordable Care Act, HHS Notice of Benefit and Payment Parameters for 2025; Updating Section 1332 Waiver Public Notice Procedures; Medicaid; Consumer Operated and Oriented Plan (CO–OP) Program; and Basic Health Program

AGENCY: Centers for Medicare & Medicaid Services (CMS), Department of Health and Human Services (HHS); Department of the Treasury.

ACTION: Final rule.

SUMMARY: This final rule includes payment parameters and provisions related to the HHS-operated risk adjustment program, as well as 2025 user fee rates for issuers offering qualified health plans (QHPs) through federally facilitated Exchanges (FFEs) and State-based Exchanges on the Federal platform (SBE–FPs). This final rule also includes requirements related to the auto re-enrollment hierarchy; essential health benefits; failure to file Federal income taxes to reconcile advance payments of the premium tax credit (APTC); non-standardized plan option limits in the FFEs and SBE–FPs and a related exceptions process; standardized plan options in the FFEs and SBE–FPs; special enrollment periods (SEPs); direct enrollment (DE) entities supporting Exchange applications and enrollments; the Insurance Affordability Program enrollment eligibility verification process; requirements for agents, brokers, web-brokers, and DE entities assisting Exchange consumers; network adequacy; public notice procedures for section 1332 waivers; prescription drug benefits; updates to the Consumer Operated and Oriented Plan (CO–OP) Program; and State flexibility on the effective date of coverage in the Basic Health Program (BHP).

DATES: These regulations are effective on June 4, 2024.

FOR FURTHER INFORMATION CONTACT: Jeff Wu, (301) 492–4305, Rogelyn McLean, (301) 492–4229, Grace Bristol, (410) 786–8437, for general information.

Debbie Noymer, (301) 448–3755, and John Barfield, (301) 492–4433 for matters related to HHS-operated risk adjustment.

John Barfield, (301) 492–4433, or Aaron Franz, (410) 786–8027, for matters related to user fees.

Brian Gubin, (410) 786–1659, for matters related to agent, broker, and web-broker guidelines.

Marisa Beatley, (301) 492–4307, for matters related to the verification process related to eligibility for insurance affordability programs and current sources of income.

Carolyn Kraemer, (301) 492–4197, for matters related to auto re-enrollment in the Exchanges.

Zarin Ahmed, (301) 492–4400, for matters related to enrollment of qualified individuals into QHPs and termination of Exchange enrollment or coverage for qualified individuals.

Claire Curtin, (301) 492–4400, for matters related to the monthly 150 percent Federal poverty level special enrollment period.

Alexandra Gribbin, (667) 290–9977, for matters related to dental coverage.

Nikolas Berkobien, (667) 290–9903, for matters related to standardized plan options and non-standardized plan option limits.

LeAnn Brodhead, (667) 290–8805, for matters related to the essential health benefits prescription drug benefit.

Carolyn Sabini, (667) 290–9750, for matters related to the essential health benefits benchmark plan policy.

Ken Buerger, (410) 786–1190, for matters related to mandates in addition to the essential health benefits.

Emily Martin, (301) 492–4423, Deborah Hunter, (443) 386–3651, or Emma Vasilak, (774) 551–6157, for matters related to establishment of Exchange network adequacy standards and ECPs.

Shilpa Gogna, (301) 492–4257, or Jenny Chen, (301) 492–5156, for matters related to approval of a State Exchange and State Exchange Blueprint requirements.

Joe Fitzpatrick, (410) 786–2761, for matters related to establishment of additional minimum standards for Exchange call center operations.

John Allison, (828) 513–1323, for matters related to Exchange operation of a centralized eligibility and enrollment platform.

Courtney De La Mater, (301) 492–4400, for matters related to the Failure to Reconcile process.

Robert Yates, (301) 492–5151, for matters related to State Exchange annual open enrollment periods.

Daniel Rosinsky-Larsson, (301) 492–4400, for matters related to SEP effective dates of coverage.

Lina Rashid, (443) 902–2823, or Kimberly Koch (202) 381–6934, for matters related to section 1332 waivers.

Jacquelyn Rudich, (301) 492–5211, for matters related to netting of payments.

Kevin Kendrick, (301) 509–6612, for matters related to the CO–OP program.

Carrie Grubert, (410) 786–8319, for matters related to the Basic Health Program (BHP) provision.

Gene Coffey, (410) 786–2234, for matters related to Medicaid eligibility.

Arshdeep Dhanoa, (301) 492–4400, for matters related to incarceration verification for QHP eligibility and periodic data matching for dual and deceased enrollees.

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I. Executive Summary

We are finalizing changes to the provisions and parameters implemented through prior rulemaking to implement the Patient Protection and Affordable Care Act (ACA).[1] These proposals are published under the authority granted to the Secretary by the ACA and the Public Health Service (PHS) Act.[2] In this final rule, we are finalizing changes related to some of the ACA provisions and parameters we previously implemented and are implementing new provisions. Our goal with these requirements is to provide consumers access to quality, affordable coverage, while minimizing administrative burden and ensuring program integrity. The changes finalized in this rule are also intended to help increase transparency, advance health equity, and mitigate health disparities.

II. Background

A. Legislative and Regulatory Overview

Title I of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) added a new title XXVII to the Public Health Service (PHS) Act to establish various reforms to the group and individual health insurance markets.

These provisions of the PHS Act were later augmented by other laws, including the ACA. Subtitles A and C of title I of the ACA reorganized, amended, and added to the provisions of part A of title XXVII of the PHS Act relating to group health plans and health insurance issuers in the group and individual markets. The term ''group health plan'' includes both insured and self-insured group health plans.

Section 2702 of the PHS Act, as added by the ACA, establishes requirements for guaranteed availability of coverage in the group and individual markets.

Section 1301(a)(1)(B) of the ACA directs all issuers of qualified health plans (QHPs) to cover the essential health benefit (EHB) package described in section 1302(a) of the ACA, including coverage of the services described in section 1302(b) of the ACA, adherence to the cost-sharing limits described in section 1302(c) of the ACA, and meeting the Actuarial Value (AV) levels established in section 1302(d) of the ACA. Section 2707(a) of the PHS Act, which is effective for plan or policy years beginning on or after January 1, 2014, extends the requirement to cover the EHB package to non-grandfathered individual and small group health insurance coverage, irrespective of whether such coverage is offered through an Exchange. In addition, section 2707(b) of the PHS Act directs non-grandfathered group health plans to ensure that cost sharing under the plan does not exceed the limitations described in section 1302(c)(1) of the ACA.

Section 1302 of the ACA provides for the establishment of an EHB package that includes coverage of EHBs (as defined by the Secretary of HHS), cost-sharing limits, and AV requirements. The law directs that EHBs be equal in scope to the benefits provided under a typical employer plan, and that they cover at least the following 10 general categories: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services, including behavioral health treatment; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care. Section 1302(d) of the ACA describes the various levels of coverage based on AV. Consistent with section 1302(d)(2)(A) of the ACA, AV is calculated based on the provision of EHB to a standard population. Section 1302(d)(3) of the ACA directs the Secretary of HHS to develop guidelines that allow for *de minimis* variation in AV calculations. Sections 1302(b)(4)(A) through (D) of the ACA establish that the Secretary must define EHB in a manner that: (1) reflects appropriate balance among the 10 categories; (2) is not designed in such a way as to discriminate based on age, disability, or expected length of life; (3) takes into account the health care needs of diverse segments of the population; and (4) does not allow denials of EHBs based on age, life expectancy, disability, degree of medical dependency, or quality of life.

Section 1311(c) of the ACA provides the Secretary the authority to issue regulations to establish criteria for the certification of QHPs. Section 1311(c)(1)(B) of the ACA requires, among the criteria for certification that the Secretary must establish by regulation, that QHPs ensure a sufficient choice of providers. Section 1311(e)(1) of the ACA grants the Exchange the authority to certify a health plan as a QHP if the health plan meets the Secretary's requirements for certification issued under section 1311(c) of the ACA, and the Exchange determines that making the plan available through the Exchange is in the interests of qualified individuals and qualified employers in the State. Section 1311(c)(6)(C) of the ACA directs the Secretary of HHS to require an Exchange to provide for special enrollment periods and section 1311(c)(6)(D) of the ACA directs the Secretary of HHS to require an Exchange to provide for a monthly enrollment period for Indians, as defined by section 4 of the Indian Health Care Improvement Act.

Section 1311(d)(3)(B) of the ACA permits a State, at its option, to require QHPs to cover benefits in addition to EHB. This section also requires a State to make payments, either to the individual enrollee or to the issuer on behalf of the enrollee, to defray the cost of these additional State-required benefits.

Section 1312(c) of the ACA generally requires a health insurance issuer to consider all enrollees in all health plans (except grandfathered health plans) offered by such issuer to be members of

[1] The Patient Protection and Affordable Care Act (Pub. L. 111–148) was enacted on March 23, 2010. The Health Care and Education Reconciliation Act of 2010 (Pub. L. 111–152), which amended and revised several provisions of the Patient Protection and Affordable Care Act, was enacted on March 30, 2010. In this rulemaking, the two statutes are referred to collectively as the ''Patient Protection and Affordable Care Act,'' ''Affordable Care Act,'' or ''ACA.''

[2] See sections 1311, 1312, 1313, 1321, 1332, and 1343 of the ACA and section 2792 of the PHS Act.

a single risk pool for each of its individual and small group markets. States have the option to merge the individual and small group market risk pools under section 1312(c)(3) of the ACA.

Section 1312(e) of the ACA provides the Secretary with the authority to establish procedures under which a State may allow agents or brokers to (1) enroll qualified individuals and qualified employers in QHPs offered through Exchanges and (2) assist individuals in applying for advance payments of the premium tax credit (APTC) and cost-sharing reductions (CSRs) for QHPs sold through an Exchange.

Section 1312(f)(1)(B) of the ACA provides that an individual shall not be treated as a qualified individual for enrollment in a QHP if, at the time of enrollment, the individual is incarcerated, other than incarceration pending the disposition of charges.

Sections 1313 and 1321 of the ACA provide the Secretary with the authority to oversee the financial integrity of State Exchanges, their compliance with HHS standards, and the efficient and non-discriminatory administration of State Exchange activities. Section 1313(a)(5)(A) of the ACA provides the Secretary with the authority to implement any measure or procedure that the Secretary determines is appropriate to reduce fraud and abuse in the administration of the Exchanges. Section 1321 of the ACA provides for State flexibility in the operation and enforcement of Exchanges and related requirements.

Section 1321(a) of the ACA provides broad authority for the Secretary to establish standards and regulations to implement the statutory requirements related to Exchanges, QHPs and other components of title I of the ACA, including such other requirements as the Secretary determines appropriate. When operating an FFE under section 1321(c)(1) of the ACA, HHS has the authority under sections 1321(c)(1) and 1311(d)(5)(A) of the ACA to collect and spend user fees. Office of Management and Budget (OMB) Circular A–25 Revised establishes Federal policy regarding user fees and specifies that a user charge will be assessed against each identifiable recipient for special benefits derived from Federal activities beyond those received by the public.

Section 1321(d) of the ACA provides that nothing in title I of the ACA must be construed to preempt any State law that does not prevent the application of title I of the ACA. Section 1311(k) of the ACA specifies that Exchanges may not establish rules that conflict with or prevent the application of regulations issued by the Secretary.

Section 1322 of the ACA establishes the Consumer Operated and Oriented Plan (CO–OP) program, which is a loan program that funds the establishment of private, non-profit, consumer-operated, consumer-oriented health plan issuers of QHPs. The ACA requires, among other requirements, that substantially all of a CO–OP's activities consist of issuing QHPs in the individual and small group markets, and that a CO–OP be governed by a board of directors where a majority is elected by members covered by policies issued by the CO–OP.

Section 1331 of the ACA provides States with the option to operate a Basic Health Program (BHP).

Section 1332 of the ACA provides the Secretary of HHS and the Secretary of the Treasury (collectively, the Secretaries) with the discretion to approve a State's proposal to waive specific provisions of the ACA, provided the State's section 1332 waiver plan meets certain requirements. Section 1332(a)(4)(B) of the ACA requires the Secretaries to issue regulations regarding procedures for the application and approval of section 1332 waivers.

Section 1343 of the ACA establishes a permanent risk adjustment program to provide payments to health insurance issuers that attract higher-than-average risk populations, such as those with chronic conditions, funded by charges collected from those issuers that attract lower-than-average risk populations, thereby reducing incentives for issuers to avoid higher-risk enrollees. Section 1343(b) of the ACA provides that the Secretary, in consultation with States, shall establish criteria and methods to be used in carrying out the risk adjustment activities under this section. Consistent with section 1321(c) of the ACA, the Secretary is responsible for operating the HHS risk adjustment program in any State that fails to do so.[3]

Section 1401(a) of the ACA added section 36B to the Internal Revenue Code (the Code), which, among other things, requires that a taxpayer reconcile APTC for a year of coverage with the amount of the premium tax credit (PTC) the taxpayer is allowed for the year.

Section 1402 of the ACA provides for, among other things, reductions in cost sharing for EHB for qualified low- and moderate-income enrollees in silver level QHPs offered through the individual market Exchanges. This section also provides for reductions in cost sharing for Indians enrolled in QHPs at any metal level.

Section 1411(c) of the ACA requires the Secretary to submit certain information provided by applicants under section 1411(b) of the ACA to other Federal officials for verification, including income and family size information to the Secretary of the Treasury. Section 1411(d) of the ACA provides that the Secretary must verify the accuracy of information provided by applicants under section 1411(b) of the ACA, for which section 1411(c) of the ACA does not prescribe a specific verification procedure, in such manner as the Secretary determines appropriate.

Section 1411(f) of the ACA requires the Secretary, in consultation with the Secretary of the Treasury and the Secretary of Homeland Security, and the Commissioner of Social Security, to establish procedures for hearing and making decisions governing appeals of Exchange eligibility determinations. Section 1411(f)(1)(B) of the ACA requires the Secretary to establish procedures to redetermine eligibility on a periodic basis, in appropriate circumstances, including eligibility to purchase a QHP through the Exchange and for APTC and CSRs.

Section 1411(g) of the ACA allows the use of applicant information only for the limited purpose of, and to the extent necessary for ensuring the efficient operation of the Exchange, including by verifying eligibility to enroll through the Exchange and for APTC and CSRs, and limits the disclosure of such information.

Section 1413 of the ACA directs the Secretary to establish, subject to minimum requirements, a streamlined enrollment process for enrollment in QHPs and all insurance affordability programs.

Section 5000A of the Code, as added by section 1501(b) of the ACA, requires individuals to have minimum essential coverage (MEC) for each month, qualify for an exemption, or make an individual shared responsibility payment. Under the Tax Cuts and Jobs Act, which was enacted on December 22, 2017, the individual shared responsibility payment is reduced to $0, effective for months beginning after December 31, 2018. Notwithstanding that reduction, certain exemptions are still relevant to determine whether individuals aged 30 and above qualify to enroll in catastrophic coverage under §§ 155.305(h) and 156.155(a)(5).

Section 1902(r)(2)(A) of the Social Security Act (the Act), which permits

[3] In the 2014 through 2016 benefit years, HHS operated the risk adjustment program in every State and the District of Columbia, except Massachusetts. Beginning with the 2017 benefit year, HHS has operated the risk adjustment program in all 50 States and the District of Columbia.

States to apply less restrictive methodologies than cash assistance program methodologies in determining eligibility for certain eligibility groups.

1. Premium Stabilization Programs

The premium stabilization programs refer to the HHS risk adjustment, risk corridors, and reinsurance programs established by the ACA.[4] For past rulemaking, we refer readers to the following rules:

- In the March 23, 2012 **Federal Register** (77 FR 17219) (Premium Stabilization Rule), we implemented the premium stabilization programs.
- In the March 11, 2013 **Federal Register** (78 FR 15409) (2014 Payment Notice), we finalized the benefit and payment parameters for the 2014 benefit year to expand the provisions related to the premium stabilization programs and set forth payment parameters in those programs.
- In the October 30, 2013 **Federal Register** (78 FR 65046), we finalized the modification to the HHS risk adjustment methodology related to community rating States.
- In the November 6, 2013 **Federal Register** (78 FR 66653), we published a correcting amendment to the 2014 Payment Notice to address how an enrollee's age for the risk score calculation would be determined under the HHS risk adjustment methodology.
- In the March 11, 2014 **Federal Register** (79 FR 13743) (2015 Payment Notice), we finalized the benefit and payment parameters for the 2015 benefit year to expand the provisions related to the premium stabilization programs, set forth certain oversight provisions, and establish payment parameters in those programs.
- In the May 27, 2014 **Federal Register** (79 FR 30240), we announced the 2015 fiscal year sequestration rate for the HHS-operated risk adjustment program.
- In the February 27, 2015 **Federal Register** (80 FR 10749) (2016 Payment Notice), we finalized the benefit and payment parameters for the 2016 benefit year to expand the provisions related to the premium stabilization programs, set forth certain oversight provisions, and establish the payment parameters in those programs.
- In the March 8, 2016 **Federal Register** (81 FR 12203) (2017 Payment Notice), we finalized the benefit and payment parameters for the 2017 benefit year to expand the provisions related to the premium stabilization programs, set forth certain oversight provisions, and establish the payment parameters in those programs.
- In the December 22, 2016 **Federal Register** (81 FR 94058) (2018 Payment Notice), we finalized the benefit and payment parameters for the 2018 benefit year, added the high-cost risk pool parameters to the HHS risk adjustment methodology, incorporated prescription drug factors in the adult models, established enrollment duration factors for the adult models, and finalized policies related to the collection and use of enrollee-level External Data Gathering Environment (EDGE) data.
- In the April 17, 2018 **Federal Register** (83 FR 16930) (2019 Payment Notice), we finalized the benefit and payment parameters for the 2019 benefit year, created the State flexibility framework permitting States to request a reduction in risk adjustment State transfers calculated by HHS, and adopted a new error rate methodology for HHS–RADV adjustments to transfers.
- In the May 11, 2018 **Federal Register** (83 FR 21925), we published a correction to the 2019 HHS risk adjustment coefficients in the 2019 Payment Notice.
- On July 27, 2018, consistent with 45 CFR 153.320(b)(1)(i), we updated the 2019 benefit year final HHS risk adjustment model coefficients to reflect an additional recalibration related to an update to the 2016 enrollee-level EDGE data set.[5]
- In the July 30, 2018 **Federal Register** (83 FR 36456), we adopted the 2017 benefit year HHS risk adjustment methodology as established in the final rules published in the March 23, 2012 (77 FR 17220 through 17252) and March 8, 2016 (81 FR 12204 through 12352) editions of the **Federal Register**. The final rule set forth an additional explanation of the rationale supporting the use of Statewide average premium in the State payment transfer formula for the 2017 benefit year, including the reasons why the program is operated by HHS in a budget-neutral manner. The final rule also permitted HHS to resume 2017 benefit year HHS risk adjustment payments and charges. HHS also provided guidance as to the operation of the HHS-operated risk adjustment program for the 2017 benefit year in light of the publication of the final rule.
- In the December 10, 2018 **Federal Register** (83 FR 63419), we adopted the 2018 benefit year HHS risk adjustment methodology as established in the final rules published in the March 23, 2012 (77 FR 17219) and the December 22, 2016 (81 FR 94058) editions of the **Federal Register**. In the rule, we set forth an additional explanation of the rationale supporting the use of Statewide average premium in the State payment transfer formula for the 2018 benefit year, including the reasons why the program is operated by HHS in a budget-neutral manner.
- In the April 25, 2019 **Federal Register** (84 FR 17454) (2020 Payment Notice), we finalized the benefit and payment parameters for the 2020 benefit year, as well as the policies related to making the enrollee-level EDGE data available as a limited data set for research purposes and expanding the HHS uses of the enrollee-level EDGE data, approval of the request from Alabama to reduce HHS risk adjustment transfers by 50 percent in the small group market for the 2020 benefit year, and updates to HHS–RADV program requirements.
- On May 12, 2020, consistent with § 153.320(b)(1)(i), we published the 2021 Benefit Year Final HHS Risk Adjustment Model Coefficients on the CCIIO website.[6]
- In the May 14, 2020 **Federal Register** (85 FR 29164) (2021 Payment Notice), we finalized the benefit and payment parameters for the 2021 benefit year, as well as adopted updates to the HHS risk adjustment models' hierarchical condition categories (HCCs) to transition to ICD–10 codes, approved the request from Alabama to reduce HHS risk adjustment transfers by 50 percent in the small group market for the 2021 benefit year, and modified the outlier identification process under the HHS–RADV program.
- In the December 1, 2020 **Federal Register** (85 FR 76979) (Amendments to the HHS-Operated Risk Adjustment Data Validation Under the Patient Protection and Affordable Care Act's HHS-Operated Risk Adjustment Program (2020 HHS–RADV Amendments Rule)), we adopted the creation and application of Super HCCs in the sorting step that assigns HCCs to failure rate groups, finalized a sliding scale adjustment in HHS–RADV error rate calculation, and added a constraint for negative error rate outliers with a negative error rate. We also established a transition from the prospective application of HHS–RADV adjustments to apply HHS–RADV results to risk

[4] See ACA section 1341 (transitional reinsurance program), ACA section 1342 (risk corridors program), and ACA section 1343 (HHS risk adjustment program).

[5] CMS. (2018, July 27). *Updated 2019 Benefit Year Final HHS Risk Adjustment Model Coefficients. https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/2019-Updtd-Final-HHS-RA-Model-Coefficients.pdf.*

[6] CMS. (2020, May 12). Final 2021 Benefit Year Final HHS Risk Adjustment Model Coefficients. *https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/Final-2021-Benefit-Year-Final-HHS-Risk-Adjustment-Model-Coefficients.pdf.*

scores from the same benefit year as that being audited.

• In the September 2, 2020 **Federal Register** (85 FR 54820), we issued an interim final rule containing certain policy and regulatory revisions in response to the COVID–19 public health emergency (PHE), wherein we set forth HHS risk adjustment reporting requirements for issuers offering temporary premium credits in the 2020 benefit year.

• In the May 5, 2021 **Federal Register** (86 FR 24140) (part 2 of the 2022 Payment Notice), we finalized a subset of proposals from the 2022 Payment Notice proposed rule, including policy and regulatory revisions related to the HHS-operated risk adjustment program, finalization of the benefit and payment parameters for the 2022 benefit year, and approval of the request from Alabama to reduce HHS risk adjustment transfers by 50 percent in the individual and small group markets for the 2022 benefit year. In addition, this final rule established a revised schedule of collections for HHS–RADV and updated the provisions regulating second validation audit (SVA) and initial validation audit (IVA) entities.

• On July 19, 2021, consistent with § 153.320(b)(1)(i), we released Updated 2022 Benefit Year Final HHS Risk Adjustment Model Coefficients on the CCIIO website, announcing some minor revisions to the 2022 benefit year final HHS risk adjustment adult model coefficients.[7]

• In the May 6, 2022 **Federal Register** (87 FR 27208) (2023 Payment Notice), we finalized revisions related to the HHS-operated risk adjustment program, including the benefit and payment parameters for the 2023 benefit year, HHS risk adjustment model recalibration, and policies related to the collection and extraction of enrollee-level EDGE data. We also finalized the adoption of the interacted HCC count specification for the adult and child models, along with modified enrollment duration factors for the adult model models, beginning with the 2023 benefit year.[8] We also repealed the ability for States, other than prior participants, to request a reduction in HHS risk adjustment State transfers starting with the 2024 benefit year. In addition, we approved a 25 percent reduction to 2023 benefit year HHS risk adjustment transfers in Alabama's individual market and a 10 percent reduction to 2023 benefit year HHS risk adjustment transfers in Alabama's small group market. We also finalized further refinements to the HHS–RADV error rate calculation methodology beginning with the 2021 benefit year.

• In the April 27, 2023 **Federal Register** (88 FR 25740) (2024 Payment Notice), we finalized the benefit and payment parameters for the 2024 benefit year, amended the EDGE discrepancy materiality threshold and data collection requirements, and reduced the risk adjustment user fee. For the 2024 benefit year, we repealed the State flexibility policy, including for prior participant States, and approved 50 percent reductions to HHS risk adjustment transfers for Alabama's individual and small group markets. In addition, we finalized several refinements to HHS–RADV program requirements, such as shortening the window to confirm SVA findings or file a discrepancy report, changing the HHS–RADV materiality threshold for random and targeted sampling, and no longer exempting exiting issuers from adjustments to risk scores and HHS risk adjustment transfers when they are negative error rate outliers. We also announced the discontinuance of the Lifelong Permanent Condition List (LLPC) and Non-EDGE Claims (NEC) in HHS–RADV beginning with the 2022 benefit year.

2. Program Integrity

We have finalized program integrity standards related to the Exchanges and premium stabilization programs in two rules: the ''first Program Integrity Rule'' published in the August 30, 2013 **Federal Register** (78 FR 54069), and the ''second Program Integrity Rule'' published in the October 30, 2013 **Federal Register** (78 FR 65045). We also refer readers to the 2019 Patient Protection and Affordable Care Act; Exchange Program Integrity final rule (2019 Program Integrity Rule) published in the December 27, 2019 **Federal Register** (84 FR 71674).

In the April 27, 2023 **Federal Register** (88 FR 25740) (2024 Payment Notice), we finalized a policy to implement improper payment pre-testing and assessment (IPPTA) requirements for State Exchanges to ensure adherence to the Payment Integrity Information Act of 2019. In addition, we finalized allowing additional time for HHS to review evidence submitted by agents and brokers to rebut allegations pertaining to Exchange agreement suspensions or terminations. We also introduced consent and eligibility documentation requirements for agents and brokers.

3. Market Rules

For past rulemaking related to the market rules, we refer readers to the following rules:

• In the April 8, 1997 **Federal Register** (62 FR 16894), HHS, with the Department of Labor and Department of the Treasury, published an interim final rule relating to the HIPAA health insurance reforms. In the February 27, 2013 **Federal Register** (78 FR 13406) (2014 Market Rules), we published the health insurance market rules.

• In the May 27, 2014 **Federal Register** (79 FR 30240) (2015 Market Standards Rule), we published the Exchange and insurance market standards for 2015 and beyond.

• In the December 22, 2016 **Federal Register** (81 FR 94058), we provided additional guidance on guaranteed availability and guaranteed renewability.

• In the April 18, 2017 **Federal Register** (82 FR 18346) (Market Stabilization final rule), we further interpreted the guaranteed availability provision.

• In the April 17, 2018 **Federal Register** (83 FR 17058) (2019 Payment Notice), we clarified that certain exceptions to the special enrollment periods only apply to coverage offered outside of the Exchange in the individual market.

• In the June 19, 2020 **Federal Register** (85 FR 37160) (2020 section 1557 final rule), in which HHS discussed section 1557 of the ACA, HHS removed nondiscrimination protections based on gender identity and sexual orientation from the guaranteed availability regulation.

• In part 2 of the 2022 Payment Notice, in the May 5, 2021 **Federal Register** (86 FR 24140), we made additional amendments to the guaranteed availability regulation regarding special enrollment periods and finalized new special enrollment periods related to untimely notice of triggering events, cessation of employer contributions or government subsidies to COBRA continuation coverage, and loss of APTC eligibility.

• In the September 27, 2021 **Federal Register** (86 FR 53412) (part 3 of the 2022 Payment Notice), which was published by HHS and the Department of the Treasury, we finalized additional amendments to the guaranteed availability regulations regarding special enrollment periods.

• In the May 6, 2022 **Federal Register** (87 FR 27208), we finalized a revision

[7] *See* CMS. (2021, July 19). 2022 Benefit Year Final HHS Risk Adjustment Model Coefficients. *https://www.cms.gov/files/document/updated-2022-benefit-year-final-hhs-risk-adjustment-model-coefficients-clean-version-508.pdf.*

[8] On May 6, 2022, we also published the 2023 Benefit Year Final HHS Risk Adjustment Model Coefficients at *https://www.cms.gov/files/document/2023-benefit-year-final-hhs-risk-adjustment-model-coefficients.pdf.*

to our interpretation of the guaranteed availability requirement to prohibit issuers from applying a premium payment to an individual's or employer's past debt owed for coverage and refusing to effectuate enrollment in new coverage.

4. Exchanges

We published a request for comment relating to Exchanges in the August 3, 2010 **Federal Register** (75 FR 45584). We issued initial guidance to States on Exchanges on November 18, 2010. In the March 27, 2012 **Federal Register** (77 FR 18310) (Exchange Establishment Rule), we implemented the Affordable Insurance Exchanges (Exchanges), consistent with title I of the ACA, to provide competitive marketplaces for individuals and small employers to directly compare available private health insurance options on the basis of price, quality, and other factors. This included implementation of components of the Exchanges and standards for eligibility for Exchanges, as well as network adequacy and essential community provider (ECP) certification standards.

In the August 17, 2011, **Federal Register** (76 FR 51201) we published a proposed rule regarding eligibility determinations, including the regulatory requirement to verify incarceration status. In the March 27, 2012, **Federal Register** (77 FR 18309) we finalized the regulatory requirement to verify incarceration attestation using an approved electronic data source that is current and accurate, and when attestations are not reasonably compatible with information in an approved data source, to resolve the inconsistency.

In the 2014 Payment Notice and the Amendments to the HHS Notice of Benefit and Payment Parameters for 2014 interim final rule, published in the March 11, 2013 **Federal Register** (78 FR 15541), we set forth standards related to Exchange user fees. We established an adjustment to the FFE user fee in the Coverage of Certain Preventive Services under the Affordable Care Act final rule, published in the July 2, 2013 **Federal Register** (78 FR 39869) (Preventive Services Rule).

In the 2016 Payment Notice, we also set forth the ECP certification standard at § 156.235, with revisions in the 2017 Payment Notice in the March 8, 2016 **Federal Register** (81 FR 12203) and the 2018 Payment Notice in the December 22, 2016 **Federal Register** (81 FR 94058).

In an interim final rule, published in the May 11, 2016 **Federal Register** (81 FR 29146), we made amendments to the parameters of certain special enrollment periods (2016 Interim Final Rule). We finalized these in the 2018 Payment Notice, published in the December 22, 2016 **Federal Register** (81 FR 94058).

In the Market Stabilization final rule, published in the April 18, 2017 **Federal Register** (82 FR 18346), we amended standards relating to special enrollment periods and QHP certification. In the 2019 Payment Notice, published in the April 17, 2018 **Federal Register** (83 FR 16930), we modified parameters around certain special enrollment periods. In the April 25, 2019 **Federal Register** (84 FR 17454), the 2020 Payment Notice established a new special enrollment period.

We published the final rule in the May 14, 2020 **Federal Register** (85 FR 29164) (2021 Payment Notice).

In the January 19, 2021 **Federal Register** (86 FR 6138) (part 1 of the 2022 Payment Notice), we finalized only a subset of the proposals in the 2022 Payment Notice proposed rule. In the May 5, 2021 **Federal Register** (86 FR 24140), we published part 2 of the 2022 Payment Notice. In the September 27, 2021 **Federal Register** (86 FR 53412) (part 3 of the 2022 Payment Notice), in conjunction with the Department of the Treasury, we finalized amendments to certain policies in part 1 of the 2022 Payment Notice.

In the May 6, 2022 **Federal Register** (87 FR 27208), we finalized changes to maintain the user fee rate for issuers offering plans through the FFEs and maintain the user fee rate for issuers offering plans through the SBE–FPs for the 2023 benefit year. We also finalized various policies to address certain agent, broker, and web-broker practices and conduct. We also finalized updates to the requirement that all Exchanges conduct special enrollment period verifications.

In the April 27, 2023 **Federal Register** (88 FR 25740) (2024 Payment Notice), we revised Exchange Blueprint approval timelines, lowered the user rate fee for QHPs in the FFEs and SBE–FPs, and amended re-enrollment hierarchies for enrollees. We also finalized policies to update FFE and SBE–FP standardized plan options; further reduce the risk of plan choice overload on the FFEs and SBE–FPs by lowering the limit on non-standardized plan options that issuers may offer from four to two; introduce an exceptions process to the limitation on non-standardized plan options in FFEs and SBE–FPs; and ensure correct QHP information. In addition, to prevent gaps in coverage, we amended coverage effective date rules, lengthened the special enrollment period from 60 to 90 days to those who lose Medicaid coverage, and prohibited QHPs on FFEs and SBE–FPs from terminating coverage mid-year for dependent children who reach the applicable maximum age. We also finalized policies on verifying consumer income and permitting door-to-door assisters to solicit consumers. To ensure provider network adequacy, we finalized provider network and ECP policies for QHPs.

5. Essential Health Benefits

We established requirements relating to EHBs in the Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation Final Rule, which was published in the February 25, 2013 **Federal Register** (78 FR 12834) (EHB Rule). In the 2019 Payment Notice, published in the April 17, 2018 **Federal Register** (83 FR 16930), we added § 156.111 to provide States with additional options from which to select an EHB-benchmark plan for plan year (PY) 2020 and subsequent plan years. In the 2023 Payment Notice, published in the May 6, 2022 **Federal Register** (87 FR 27208), we revised § 156.111 to require States to notify HHS of the selection of a new EHB-benchmark plan by the first Wednesday in May of the year that is 2 years before the effective date of the new EHB-benchmark plan, otherwise the State's EHB-benchmark plan for the applicable plan year will be that State's EHB-benchmark plan applicable for the prior year. We displayed the Request for Information; Essential Health Benefits (EHB RFI), published in the December 2, 2022 **Federal Register** (87 FR 74097) to solicit public comment on a variety of topics related to the coverage of benefits in health plans subject to the EHB requirements of the ACA.

6. State Innovation Waivers

In the March 14, 2011 **Federal Register** (76 FR 13553), HHS and the Department of the Treasury (collectively, the Departments) published the ''Application, Review, and Reporting Process for Waivers for State Innovation'' proposed rule to implement section 1332(a)(4)(B) of the ACA.

In the February 27, 2012 **Federal Register** (77 FR 11700), the Departments published the ''Application, Review, and Reporting Process for Waivers for State Innovation'' final rule (2012 Final Rule).

In the October 24, 2018 **Federal Register** (83 FR 53575), the Departments issued the 2018 Guidance, which superseded the previous guidance published in the December 16, 2015 **Federal Register** (80 FR 78131) (2015 Guidance) and set forth requirements that States must meet for waivers,

application review procedures, pass-through funding determinations, certain analytical requirements, and operational considerations.

In the November 6, 2020 **Federal Register** (85 FR 71142), the Departments issued an interim final rule (November 2020 IFC), which set forth flexibilities for waivers under section 1332 during the COVID–19 Public Health Emergency.

In the December 4, 2020 **Federal Register** (85 FR 78572), the Departments published the ''Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2022 and Pharmacy Benefit Manager Standards; Updates to State Innovation Waiver (Section 1332 Waiver) Implementing Regulations'' proposed rule (2022 Payment Notice proposed rule) which proposed to codify certain policies and interpretations of the 2018 Guidance.

In the January 19, 2021 **Federal Register** (86 FR 6138), the Departments published the ''Patient Protection and Affordable Care Act; HHS Notice of Benefit and Payment Parameters for 2022; Updates to State Innovation Waiver (Section 1332 Waiver) Implementing Regulations'' final rule (part 1 of the 2022 Payment Notice) which codified many of the policies and interpretations of the 2018 Guidance.

In the September 27, 2021 **Federal Register** (86 FR 53412), part 3 of the 2022 Payment Notice, the Departments published the ''Patient Protection and Affordable Care Act; Updating Payment Parameters, Section 1332 Waiver Implementing Regulations, and Improving Health Insurance Markets for 2022 and Beyond'' final rule (September 2021 Final Rule), which superseded and rescinded the policies and interpretations outlined in the 2018 Guidance and repealed the previous codification of the interpretations of statutory guidelines in part 1 of the 2022 Payment Notice. The Departments also finalized flexibilities in the public notice requirements and post-award public participation requirements for section 1332 waivers under certain emergent situations and processes and procedures for amendments and extensions for approved waiver plans.

7. Consumer Operated and Oriented Plans (CO–OPs)

In the December 13, 2011 **Federal Register** (76 FR 77392), we published the ''Patient Protection and Affordable Care Act; Establishment of Consumer Operated and Oriented Plan (CO–OP) Program'' final rule (2011 CO–OP Rule), which established the rules governing the CO–OP program to make loans to capitalize eligible prospective CO–OPs. In the May 11, 2016 **Federal Register** (81 FR 29146), we amended several CO–OP standards related to governance requirements to provide greater flexibility, and to facilitate private market transactions that would assist efforts of CO–OPs to arrange access to new sources of needed capital.

8. Basic Health Program (BHP)

In the March 12, 2014, **Federal Register** (79 FR 14111), we published a final rule entitled ''Basic Health Program: State Administration of Basic Health Programs; Eligibility and Enrollment in Standard Health Plans; Essential Health Benefits in Standard Health Plans; Performance Standards for Basic Health Programs; Premium and Cost Sharing for Basic Health Programs; Federal Funding Process; Trust Fund and Financial Integrity,'' implementing section 1331 of the ACA, which governs the establishment of BHPs.

9. State Flexibility in the Use of Income and Resource Disregards in Medicaid Eligibility

In the January 19, 1993 **Federal Register** (58 FR 4929), we published a final rule with comment period entitled ''Medicaid Program; Eligibility and Coverage Requirements,'' in which we prescribed, at 42 CFR 435.601, the financial methodologies State Medicaid agencies must apply in determining eligibility for Medicaid, with options to apply less restrictive income and resource methodologies for the eligibility groups specified in section 1902(r)(2) of the Act.

In the August 22, 1994 **Federal Register** (59 FR 43052), we published a final rule entitled ''Medicaid Program; Eligibility and Coverage Requirements,'' in which we amended 42 CFR 435.601(f)(1) to delete cross-references to other regulatory provisions that had been removed from the CFR.

In the November 30, 2016 **Federal Register** (81 FR 86456), we published a final rule entitled ''Medicaid and Children's Health Insurance Programs: Eligibility Notices, Fair Hearing and Appeal Processes for Medicaid and Other Provisions Related to Eligibility and Enrollment for Medicaid and CHIP,'' in which we amended 42 CFR 435.601(b) to confirm that its provisions govern only individuals who are excepted from application of modified adjusted gross income financial methodologies (MAGI) in accordance with 42 CFR 435.603(j) (relating to ''Eligibility Groups for which MAGI-based methods do not apply''). We also established in 42 CFR 435.601(d)(1) the authority for States to apply less restrictive methodologies for medically needy individuals whose income eligibility is determined under 42 CFR 435.831(b)(1) (including medically needy individuals whose eligibility is determined under MAGI-based methodologies that comply with certain rules relating to the financial responsibility of relatives and other individuals described in 42 CFR 435.602).

B. Summary of Major Provisions

The regulations outlined in this final rule will be codified in 31 CFR part 33, 42 CFR part 600, and 45 CFR parts 153, 155, and 156.

1. 31 CFR Part 33 and 45 CFR Part 155

This final rule amends section 1332 Waivers for State Innovation (referred to throughout this final rule as section 1332 waivers) implementing regulations regarding State public notice and comment procedures. The Departments are finalizing changes in 31 CFR part 33 and 45 CFR part 155 to allow States the flexibility to hold a State public hearing or post-award forum in a virtual format, or hybrid format, which would be considered as the equivalent of holding an in-person meeting. Specifically, the Departments are finalizing changes to 31 CFR 33.112(c) and 45 CFR 155.1312(c) and 31 CFR 33.120(c) and 45 CFR 155.1320(c). These changes are effective immediately upon publication of this final rule.

2. 42 CFR Part 435

We are not finalizing the proposed amendment to 42 CFR 435.601(d) to remove paragraph (d)(4) at this time. The removal of this paragraph would have provided States with greater flexibility to adopt income and/or resource disregards in determining Medicaid financial eligibility for individuals excepted from the application of financial methodologies based on MAGI (''non-MAGI'' methodologies). States are already permitted to expand eligibility for individuals who are subject to non-MAGI methodologies by disregarding income and resources that would otherwise be required to be considered in determining an individual's eligibility. However, under current rules, States must apply such income and resource disregards to all individuals within each Medicaid eligibility group. Removing paragraph (d)(4) would have allowed States, when considering expanding eligibility for non-MAGI individuals, to target disregards at discrete individuals within an eligibility group. As described more fully below, many commenters raised

concerns about this proposal and recommended that we impose ''safeguards,'' ''guardrails,'' or ''no-harm'' requirements in expanding the States' disregard-related flexibility. These commenters asserted that such requirements are necessary to ensure that States do not use the flexibility to reduce eligibility or harm beneficiaries. We are not finalizing this proposal at this time to allow for further consideration of commenter concerns.

3. 42 CFR Part 600

We are finalizing the amendment, with modifications, to 42 CFR 600.320(c) to allow States a third option when choosing the effective date of eligibility for enrollment for BHP applicants. Under current rules, States have the option to choose between following: either the Medicaid rules at 42 CFR 435.915 or the Exchange rules at 45 CFR 155.420(b)(1). We are finalizing to add an option to the effective date of coverage rules that would allow States to start coverage on the first day of the month following the date of application. In addition, we are adding another option under 42 CFR 600.320(c) that, subject to HHS approval, a State may establish its own effective date of eligibility for enrollment policy.

4. 45 CFR Part 153

In accordance with the OMB Report to Congress on the Joint Committee Reductions for Fiscal Year 2024, the HHS-operated risk adjustment program is subject to the fiscal year 2024 sequestration.[9] Therefore, the HHS-operated risk adjustment program will sequester payments made from fiscal year 2024 resources (that is, funds collected during the 2024 fiscal year) at a rate of 5.7 percent.

We are finalizing the recalibration of the 2025 benefit year HHS risk adjustment models using the 2019, 2020, and 2021 benefit year enrollee-level EDGE data. For the 2025 benefit year, we are finalizing the continued application of a market pricing adjustment to the plan liability associated with Hepatitis C drugs in the HHS risk adjustment models (see, for example, 84 FR 17463 through 17466). We are finalizing a modification to the adjustment factors for the receipt of CSRs in the HHS risk adjustment models to improve predictive accuracy for the American Indian and Alaska Native (AI/AN) subpopulation who are enrolled in zero and limited cost-sharing plans and retaining the other CSR adjustment factors in HHS risk adjustment. We are also finalizing a risk adjustment user fee for the 2025 benefit year of $0.18 per member per month (PMPM). Additionally, we are finalizing that in certain cases, we may require a corrective action plan to address an observation identified in an HHS risk adjustment audit.

5. 45 CFR Part 155

In part 155, we are finalizing the amendment to § 155.105(b) to require that a State seeking to operate a State Exchange must first operate an SBE–FP for at least one plan year, including its open enrollment period. We believe this requirement will give States sufficient time to create, staff, and structure a State Exchange that could transition to operating its own platform and establish relationships with interested parties critical to a State Exchange's success in operating a Navigator and consumer outreach program, assuming plan management responsibilities, and communicating effectively with consumers to support enrollment and avoid health care coverage gaps.

We are finalizing the revision to § 155.106(a)(2) as it pertains to Exchange Blueprint requirements for States transitioning to a State Exchange. Specifically, we are finalizing the addition that we may require that a State submitting a Blueprint application seeking to operate a State Exchange provide, upon request, supplemental documentation to HHS detailing the State's implementation of its State Exchange functionality, including information regarding the State's ability to implement and comply with Federal requirements for operating an Exchange, as laid out in the State Exchange Blueprint. This could include a State submitting detailed plans regarding its State Exchange consumer assistance programs and activities, such as information on its direct outreach plans. Further, we are finalizing a requirement that a State applying to transition to a State Exchange must provide the public with a notice and copy of its State Exchange Blueprint application, as well as conduct periodic public engagements whereby interested parties can learn about the status of a State's transition to a State Exchange and provide input on that transition.

We are finalizing the amendment to § 155.170(a)(2) to codify that benefits covered in a State's EHB benchmark plan will not be considered in addition to EHB, even if they had been required by State action taking place after December 31, 2011, other than for purposes of compliance with Federal requirements. Under this policy, there would be no obligation for the State to defray the cost of a State mandate enacted after December 31, 2011, that requires coverage of a benefit if that benefit is included in the State's EHB-benchmark plan. Benefits that are covered in a State's EHB-benchmark plan will not be considered in addition to EHB and will remain subject to the various rules applicable to the EHB, including the prohibition on discrimination in accordance with § 156.125, limitations on cost sharing in accordance with § 156.130, and restrictions on annual or lifetime dollar limits in accordance with § 147.126. We believe that this change would promote consumer protections and facilitate compliance with the defrayal requirement by making the identification of benefits in addition to EHB more intuitive.

At § 155.205(a), we are finalizing, with modifications, the establishment of additional minimum standards for Exchange call center operations. Specifically, we are finalizing the requirement that all Exchange call centers, other than those of SBE–FPs and Small Business Health Options Program (SHOP) Exchanges that do not provide for enrollment in SHOP coverage through an online SHOP enrollment platform, provide consumer access to a live call center representative during an Exchange's published hours of operation to assist with submitting their Exchange application. We believe speaking to a live representative will help troubleshoot consumer Exchange application issues, provide a real time opportunity for a live representative to explain Exchange application terminology to a consumer, ensure the consumer provides the most correct information for the Exchange application, alleviate unnecessary follow-up, and provide greater overall consumer satisfaction.

We are finalizing the amendment to § 155.205(b)(4) to require that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform) such that the Exchange allows for the submission of the single, streamlined application for enrollment in a QHP and insurance affordability programs through the Exchange's website and performs eligibility determinations for all consumers based on submissions of the single, streamlined application. Further, we are finalizing the amendment to § 155.302(a)(1) to clarify that the Exchange, through the centralized

[9] OMB. (2023, March 13). OMB Report to the Congress on the BBEDCA 251A Sequestration for Fiscal Year 2024. *https://www.whitehouse.gov/wp-content/uploads/2023/03/BBEDCA_Sequestration_Report_and_Letter_3-13-2024.pdf.*

eligibility and enrollment platform operated on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), is the entity that is responsible for making all determinations regarding the eligibility for QHP coverage and insurance affordability programs regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website (or, for SBE–FPs, on the Federal eligibility and enrollment platform), or on a website operated by a non-Exchange website allowed for under § 155.220 or § 155.221. We are also clarifying that only entities that an Exchange elects to contract with to operate its centralized eligibility and enrollment platform can perform this function on behalf of an Exchange, such that Exchanges will not be able to solely rely on non-Exchange entities, including a web-broker (defined at § 155.20) or other entities under § 155.220 or § 155.221, to make such eligibility determinations on behalf of the Exchanges.

We are also finalizing the amendment to § 155.205(b)(5) to require that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform) so that the Exchange (or, for an SBE–FP, the Federal eligibility and enrollment platform) meets the requirement under § 155.400(c) to maintain record of all effectuated enrollments in QHPs, including changes in effectuated QHP enrollments.

We are finalizing the amendment to § 155.220(h) specifying that the CMS Administrator, who is a principal officer, is the entity responsible for handling requests by agents, brokers, and web-brokers for reconsideration of HHS' decision to terminate their Exchange agreement(s) for cause. This amendment will improve transparency by specifying who would review reconsideration requests under § 155.220(h).

We are finalizing changes to §§ 155.220 and 155.221 to apply certain standards to web-brokers and Direct Enrollment (DE) entities assisting consumers and applicants across all Exchanges, including State Exchanges, for both the State Exchange's Individual Exchange and SHOP. We seek to ensure that certain current minimum HHS standards applicable in the FFEs and SBE–FPs, related to web-broker website display of standardized QHP comparative information, disclaimer language, information on eligibility for APTC/CSRs, operational readiness, and access by downstream agents and brokers, also apply to web-brokers in State Exchanges. Similarly, we are finalizing the extension of certain DE entity requirements applicable in the FFEs and SBE–FPs related to marketing and display of QHPs, providing consumers with correct information and refraining from certain conduct, marketing of non-QHPs, website disclaimer language, and operational readiness to DE entities across all Exchanges, to newly apply to DE entities in State Exchanges. These policies will help establish greater general uniformity with respect to these requirements for web-brokers and DE entities operating in the Exchanges and establish minimum Federal consumer protections in all States, regardless of the Exchange model.

We are finalizing updates to § 155.221(b) to require that *HealthCare.gov* changes be reflected and prominently displayed on DE entity non-Exchange websites assisting consumers in FFEs and SBE–FPs within a notice period [10] set by HHS. We are also finalizing the requirement that DE entities make these display changes in a manner consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. This approach codifies our existing practice of communicating important changes to the *HealthCare*.gov display to EDE entities to ensure their EDE websites conform to those changes and provide the same vital information to consumers, expands our existing change request processes to permit entities to request deviations from the required display changes, and requires DE entities that do not participate in EDE to also comply with this practice. Additionally, this approach will also require that all display changes which affect the visual aspects of the website that users see and interact with must be prominently displayed on the non-Exchange websites. Finally, we are also finalizing the extension of this policy to require State Exchanges that choose to implement a DE program to require their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made by State Exchanges to State Exchanges' websites on their non-Exchange websites, unless the State Exchange approves a deviation from those standards should the State Exchange elect to permit deviation requests.

We are finalizing, in connection with the failure to file and reconcile process at § 155.305(f)(4), that Exchanges be required to send notices to tax filers for the first year in which they have been determined to have failed to reconcile APTC as an initial warning to inform and educate tax filers that they need to file and reconcile, or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive year. We clarify in the rule that an Exchange must either send a direct notice to a tax filer as described above or send a more general notice to an enrollee or their tax filer explaining that they are at risk of losing APTC. Currently, the regulation does not detail notification procedures for tax filers who have failed to reconcile for 1 year. We intend to provide implementation guidance and sample notices prior to the restart of FTR processes. We are finalizing the requirement that all Exchanges be required to send informative notices for the first year in which tax filers have been identified as failing to file and reconcile.

We are finalizing the amendment to § 155.315(e) to provide that all Exchanges can accept applicant incarceration status attestations without further verification, and Exchanges may verify applicant incarceration status using an HHS-approved verification data source. HHS would approve an alternative electronic data source for State Exchanges to use for incarceration verification if it provides data that are current and accurate, and if its use minimizes administrative costs and burdens.

We are finalizing the proposal to reinterpret State Exchange and State Medicaid and Children's Health Insurance Program (CHIP) agency use of the Federal Data Services Hub to access and use the income data provided by the Verify Current Income (VCI) Hub service as a State Exchange or a State Medicaid and CHIP agency function because these State entities use this optional service to implement eligibility verification requirements applicable to them. More specifically, State Exchanges and State Medicaid and CHIP agencies have the option to use this information to verify a tax household's annual income attestation for Exchange QHP eligibility and the Medicaid applicant's current household income as required to make insurance affordability program eligibility determinations. We are also finalizing that these State agencies must pay for their use of the VCI Hub Service, and HHS will invoice

[10] ''Notice period'' refers to the time period that DE entities have to reflect and prominently display *HealthCare.gov* changes communicated to them by HHS pursuant to this proposal.

them monthly for the amount they must pay to reimburse HHS for the costs of their access and actual utilization of CSI income data from the prior month, including an administrative fee amount. In accordance with these policies, we are finalizing the amendment to § 155.320(c) to reflect this reinterpretation for the Exchanges but did not propose to amend the Medicaid regulations as the Medicaid regulations already address Medicaid agency verification requirements and are not typically used to delineate Medicaid agency operations in this manner.

We are finalizing the revision to § 155.330(d) to require Exchanges to conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage. Additionally, we are finalizing the revision to § 155.330(d)(3) to grant the Secretary the authority to temporarily suspend the periodic data matching (PDM) requirement during certain situations or circumstances that lead to the limited availability of data needed to conduct PDM or of documentation needed for an enrollee to notify the Exchange that the result of PDM is inaccurate, as described in § 155.330(e)(2)(i)(C). These policies will align § 155.330(d) with current Federal Exchange policy and operations, prevent overpayment of QHP premiums, and accurately capture household QHP eligibility based on household size.

We are finalizing, as proposed, the amendment to § 155.335(j)(1) and (2) to require Exchanges to re-enroll individuals who are enrolled in catastrophic coverage, as defined in section 1302(e) of the ACA, into a new QHP for the coming plan year, except that we are amending the new language that we proposed at § 155.335(j)(1)(v) and (j)(2)(iv) to incorporate the phrase, ''to the extent permitted by applicable State law.'' Incorporating these individuals enrolled in catastrophic coverage into the auto re-enrollment hierarchy rules at § 155.335(j) will help ensure continuity of coverage in cases where the issuer does not continue to offer a catastrophic plan for the new plan year, or these individuals are no longer eligible for enrollment in a catastrophic plan for the new year, and these individuals do not actively select a different QHP. We are also finalizing the addition of a new paragraph (j)(5) to § 155.335 to establish that an Exchange may not newly auto re-enroll into catastrophic coverage an enrollee who is currently enrolled in coverage of a metal level as defined in section 1302(d) of the ACA. This change reflects our current practice for Exchanges on the Federal platform.

We are finalizing the amendment to § 155.400(e)(2) to codify that the flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors is not limited to extensions of the binder payment.

We are finalizing, with modifications, the amendment to § 155.410(e)(4)(ii) to revise parameters around the adoption of an alternative open enrollment period by a State Exchange. Specifically, we are finalizing that for benefit years beginning on or after January 1, 2025, State Exchanges must adopt an open enrollment period that begins on November 1 of the calendar year preceding the benefit year and ends January 15 of the applicable benefit year or later. Additionally, as a modification, we are finalizing new paragraph (e)(4)(iii), which provides flexibility for any State Exchange that held an open enrollment period that began before November 1, 2023, and ended before January 15, 2024, for the 2024 benefit year to continue to begin open enrollment before November 1 for consecutive future benefit years, so long as the open enrollment period continues uninterrupted for at least 11 weeks. If the State Exchange changes the dates of the annual open enrollment period after the effective date of this rule, it must comply with paragraphs (e)(4)(i) and (ii) for all future annual open enrollment periods. Finally, we have also finalized a modification to amend § 155.410(e)(4)(i) to reference new paragraph (e)(4)(iii). We believe these policies will give consumers ample time to enroll in coverage; provide Navigators, certified application counselors, and agents and brokers ample time to assist all interested applicants; balance consistency against providing State Exchanges with additional flexibility; reduce disruption to current Exchange operations; reduce consumer confusion; and improve access to health coverage.

At § 155.420(b), we are finalizing aligning the effective dates of coverage after selecting a plan during certain special enrollment periods across all Exchanges, including State Exchanges. We are requiring all State Exchanges to provide coverage that is effective on the first day of the month following plan selection, or an earlier date, if a consumer enrolls in a QHP during special enrollment periods that follow the regular effective dates of coverage in 45 CFR 155.420(b). This policy will prevent coverage gaps, particularly for consumers transitioning between different Exchanges or from other insurance coverage.

We are finalizing the amendment to paragraph § 155.420(d)(16) to revise the parameters around the availability of a special enrollment period for APTC-eligible qualified individuals with a projected annual household income no greater than 150 percent of the Federal Poverty Level (FPL). Specifically, we are finalizing to remove the limitation that this special enrollment period is only available to a consumer whose applicable taxpayer's applicable percentage, which is used to determine the amount of the consumer's premium not covered by APTC, is 0 percent, and to give Exchanges the option to permanently provide this special enrollment period. We believe this policy will provide affordable coverage to more uninsured people and additional enrollment opportunities to low-income consumers.

We are finalizing the addition of § 155.430(b)(1)(iv)(D) to permit an enrollee to retroactively terminate the enrollee's enrollment in a QHP through an Exchange on the Federal platform when the enrollee enrolls in Medicare Parts A or B (including enrollment in Parts A and B through a Medicare Advantage plan). The effective date of the retroactive termination must be no earlier than the later of (1) the day before the first day of coverage under Medicare Parts A or B or a Medicare Advantage plan, and (2) the day is 6 months before retroactive termination of QHP coverage is requested. Enrollees must request retroactive termination of coverage within 60 days of the date they retroactively enroll in Medicare (the date the enrollment occurs, not the Medicare coverage effective date). We are also finalizing that retroactive terminations are not permitted for stand-alone dental plans (SADPs). This policy will allow consumers to avoid overlapping coverage and paying unnecessary premiums. HHS has the option to elect whether to implement this provision for Exchanges on the Federal platform, and State Exchanges will have the option of implementing this policy.

Under § 155.1050(a)(2)(i)(A), we are finalizing that for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A). Additionally, we are finalizing that, for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews prior to certifying any plan as a QHP, consistent

with the reviews conducted by the FFEs under § 156.230. Specifically, we are finalizing at § 155.1050(a)(2)(i)(B) that, for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct network adequacy reviews to evaluate a plan's compliance with network adequacy standards under § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(2)(i)(A) prior to certifying any plan as a QHP, while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4). We are also finalizing § 155.1050(a)(2)(ii) to provide that, for plan years beginning on or after January 1, 2026, HHS may grant an exception to the requirements described under § 155.1050(a)(2)(i) to a State Exchange or SBE–FP that demonstrates with evidence-based data, in a form and manner specified by HHS, that (1) the Exchange applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4); and (2) the Exchange evaluates whether plans comply with applicable network adequacy standards prior to certifying any plan as a QHP. Lastly, we are finalizing § 155.1050(a)(2)(i)(C) to provide that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must require that all issuers seeking certification of a plan as a QHP submit information to the Exchange reporting whether or not network providers offer telehealth services.

6. 45 CFR Part 156

In part 156, after reviewing the public comments and revising our projections based on newly available data that impacted our enrollment projections, we are finalizing an FFE user fee rate of 1.5 percent of total monthly premiums and an SBE–FP user fee rate of 1.2 percent of total monthly premiums. On November 15, 2023, we issued the 2025 benefit year premium adjustment percentage index and related payment parameters in guidance, consistent with the policy finalized in part 2 of the 2022 Payment Notice.[11]

For benefit years beginning on or after January 1, 2026, we are finalizing three revisions to the standards for State selection of EHB-benchmark plans at § 156.111. First, we are finalizing our proposal to consolidate the options for States to change EHB-benchmark plans at § 156.111(a) to reduce the burden on States to decide between three functionally identical choices. Second, we are finalizing revisions to the typicality standard at § 156.111(b)(2) so that, in demonstrating that a State's new EHB-benchmark plan provides a scope of benefits that is equal to the scope of benefits of a typical employer plan in the State, the scope of benefits of a typical employer plan in the State will be defined as any scope of benefits that is as or more generous than the scope of benefits in the State's least generous typical employer plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), and as or less generous than the scope of benefits in the State's most generous typical employer plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), among the typical employer plans currently defined at § 156.111(b)(2)(i)(A) and (B). We are also finalizing the removal of the generosity standard at § 156.111(b)(2)(ii) and a technical revision to the language regarding supplementation at § 156.111(b)(2)(i). Third, we are finalizing revisions to § 156.111(e)(3) to require States to submit a formulary drug list as part of their application to change EHB-benchmark plans only if the State is seeking to change its prescription drug EHB.

We are finalizing the removal of the regulatory prohibition at § 156.115(d) on issuers from including routine non-pediatric dental services as an EHB beginning with PY 2027, which would provide States the option to add routine adult dental services as an EHB by updating their EHB-benchmark plans pursuant to § 156.111.

We are finalizing the amendment to § 156.122 to codify that prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB. As a result, they would be subject to requirements including the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits, unless the coverage of the drug is mandated by State action and is in addition to EHB pursuant to § 155.170, in which case the drug will not be considered EHB. In addition, for plan years beginning on or after January 1, 2026, we are finalizing the amendment to § 156.122 to provide that the Pharmacy & Therapeutics (P&T) committee must include a patient representative. We also sought and received comments on a possible future policy proposal to replace the United States Pharmacopeia (USP) Medicare Model Guidelines (MMG) with the USP Drug Classification system (DC) to classify the prescription drugs required to be covered as EHB under § 156.122(a)(1).

For PY 2025, we are finalizing the proposal to follow the approach finalized in the 2024 Payment Notice concerning standardized plan option metal levels, and to otherwise maintain continuity with our approach to standardized plan options finalized in the 2023 and 2024 Payment Notices.[12] We are finalizing only minor updates to the plan designs for PY 2025 to ensure these plans have AVs within the permissible *de minimis* range for each metal level. Our updates to plan designs for PY 2025 are detailed in the discussion of § 156.201 in the preamble of this final rule, specifically in Tables 12 and 13.

We are finalizing an exceptions process at § 156.202 that will allow issuers in the FFEs and SBE–FPs to offer additional non-standardized plan options per product network type, metal level, inclusion of dental and vision benefit coverage, and service area for PY 2025 and subsequent plan years, if the issuer can demonstrate that these additional non-standardized plans have specific design features that will substantially benefit consumers with chronic and high-cost conditions and meet other requirements.

We are finalizing a new regulatory provision that would permit us to allow a CO–OP loan recipient to voluntarily terminate its loan agreement with us and cease to constitute a qualified non-profit health insurance issuer (QNHII), for the purpose of pursuing innovative business plans that are not otherwise consistent with the governance requirements and business standards applicable to a CO–OP borrower. Under the new regulatory provision, we will be able to consider a request by a CO–OP to voluntarily terminate its loan agreement for reasons other than financial viability, provided all outstanding CO–OP loans issued to the loan recipient are repaid in full prior to termination, and we believe granting the request would meaningfully enhance consumer access to quality, affordable, member-focused, non-profit health care options in affected markets.

We are finalizing conforming amendments to the payment and collections process set forth at

[11] *https://www.cms.gov/files/document/2025-papi-parameters-guidance-2023-11-15.pdf.*

[12] This includes continuation of the differential display of standardized plan options on *HealthCare.gov* and enforcement of the standardized plan options display requirements for approved web-brokers and QHP issuers using a direct enrollment pathway to facilitate enrollment through an FFE or SBE–FP—including both the Classic Direct Enrollment (Classic DE) and Enhanced Direct Enrollment (EDE) Pathways.

§ 156.1215 to align with the policies and regulations proposed in the Federal Independent Dispute Resolution Operations proposed rule (88 FR 75744) and that are contingent on their finalization. This provision will provide that administrative fees for utilizing the No Surprises Act Federal independent dispute resolution (IDR) process for health insurance issuers that participate in financial programs under the ACA would be subject to netting as part of HHS' integrated monthly payment and collections cycle. Additionally, we are finalizing the amendment to § 156.1215 to provide that any amount owed to the Federal Government by an issuer and its affiliates for unpaid administrative fees due to the Federal Government from these issuers and their affiliates for utilizing the Federal IDR process in accordance with § 149.510(d)(2), after HHS nets amounts owed by the Federal Government under these programs, would be the basis for calculating a debt owed to the Federal Government.

III. Summary of the Provisions of the Proposed Regulations

A. 31 CFR Part 33 and 45 CFR Part 155—Section 1332 Waivers

1. Background

Section 1332 of the ACA permits States to apply for a section 1332 waiver to pursue innovative strategies for providing their residents with access to higher value, more affordable health insurance coverage. To allow for greater flexibility in communicating with the public, we are finalizing updates to the public hearing process requirements for section 1332 waivers.

Under section 1332(b) of the ACA, the Secretary of HHS and the Secretary of the Treasury (collectively, the Secretaries) may exercise their discretion to approve a request for a section 1332 waiver only if the Secretaries determine that the proposal for the section 1332 waiver meets the following four requirements, referred to as the statutory guardrails: (1) the proposal provides coverage that is at least as comprehensive as coverage defined in section 1302(b) of the ACA and offered through Exchanges established under title I of the ACA, as certified by the Office of the Actuary of CMS, based on sufficient data from the State and from comparable States about their experience with programs created by the ACA and the provisions of the ACA that would be waived; (2) the proposal provides coverage and cost-sharing protections against excessive out-of-pocket spending that are at least as affordable for the State's residents as would be provided under title I of the ACA; (3) the proposal provides coverage to at least a comparable number of the State's residents as would be provided under title I of the ACA; and (4) the proposal does not increase the Federal deficit. The Secretaries retain their discretionary authority to deny requested section 1332 waivers when appropriate given consideration of the application, as a whole, even if a proposal for a section 1332 waiver meets the four statutory guardrails.

The Departments are responsible for monitoring an approved section 1332 waiver's compliance with the statutory guardrails and for conducting evaluations to determine the impact of the section 1332 waiver. Specifically, section 1332(a)(4)(B)(v) of the ACA requires the Secretaries to promulgate regulations that provide for a process for the periodic evaluation of approved section 1332 waivers. The Secretaries must also promulgate regulations that provide for a process under which States with approved section 1332 waivers submit to the Secretaries periodic reports concerning the implementation of the State's waiver program.[13]

2. Finalized Amendments to Normal Public Notice Requirements (31 CFR 33.112, 31 CFR 33.120, 45 CFR 155.1312, and 45 CFR 155.1320)

Sections 1332(a)(4)(B)(i) and (iii) of the ACA provide that the Secretaries shall promulgate regulations that provide for a process for public notice and comment at the State level, including public hearings, and a process for providing public notice and comment at the Federal level after the section 1332 waiver application is received by the Secretaries, respectively, that are both sufficient to ensure a meaningful level of public input. Current regulations at 31 CFR 33.112 and 45 CFR 155.1312 specify State public notice and comment period and participation requirements for proposed section 1332 waiver requests, and 31 CFR 33.116(b) and 45 CFR 155.1316(b) specify the public notice and comment period and approval requirements under the accompanying Federal process.

In the November 2020 IFC (85 FR 71142), the Departments revised regulations to set forth flexibilities in the public notice requirements and post-award public participation requirements for section 1332 waivers during the COVID–19 PHE. In the September 2021 Final Rule (86 FR 53502), the Departments extended those changes beyond the COVID–19 PHE to allow similar flexibilities in the event of future natural disasters; PHEs; or other emergent situations that threaten consumers' access to health insurance coverage, consumers' access to health care, or human life. Currently, in such an event, States may submit a request to the Departments to modify, in part, the State public notice requirements specified in 31 CFR 33.112(a)(1), (b), (c), and (d) and 45 CFR 155.1312(a)(1), (b), (c), and (d), and the Federal public notice requirement specified in 31 CFR 33.116(b) and 45 CFR 155.1316(b), pursuant to 31 CFR 33.118(a) and 45 CFR 155.1318(a).

The criteria to request a modification from the normal public notice requirements during an emergent situation are set forth in 31 CFR 33.118(b)(1) through (5) and 45 CFR 155.1318(b)(1) through (5). Pursuant to 31 CFR 33.118(b)(3) and 45 CFR 155.1318(b)(3), the State's request to modify normal public notice procedures is required to include: the justification for the requested modification from the State public notice procedures as it relates to the emergent situation and the alternative public notice procedures, including public hearings, that it proposes to implement at the State level and that are designed to provide the greatest opportunity for and level of meaningful public input from impacted interested parties that is practicable given the emergent circumstances motivating the State's request for a modification.

Since the finalization of the flexibilities in 31 CFR 33.118(b)(1) through (5) and 45 CFR 155.1318(b)(1) through (5), almost all States with approved section 1332 waivers (''section 1332 waiver States'') submitted requests that were granted by the Departments to conduct their annual post-award forums virtually instead of in-person during the COVID–19 PHE to reduce the risk of transmission of COVID–19. Similarly, during the COVID–19 PHE, States submitting new section 1332 waiver applications, waiver extension requests, or waiver amendment requests also requested to host their State public hearings virtually and these requests were also granted by the Departments. However, with the recent expiration of the Federal COVID–19 PHE [14] (and many State COVID–19 PHEs) [15] and in

[13] See ACA section 1332(a)(4)(B)(iv).

[14] The Federal COVID–19 PHE ended on May 11, 2023. *https://www.hhs.gov/about/news/2023/05/09/fact-sheet-end-of-the-covid-19-public-health-emergency.html#:~:text=That%20means%20with%20the%20COVID,the%20expiration%20of%20the%20PHE.*

[15] For example, in Alaska the State's PHE ended on July 1, 2022 (*https://health.alaska.gov/PHE/Pages/default.aspx*); in Colorado the Disaster

Continued

line with the requirements of 31 CFR 33.120(c) and 45 CFR 155.1320(c) and 31 CFR 33.112(c) and 45 CFR 155.1312(c), the Departments have ceased granting States' requests to hold public hearings or post-award forums virtually instead of in-person on the basis of the Federal COVID–19 PHE.

Upon review and consideration of the lessons learned during the COVID–19 PHE, the Departments have determined that some current provisions regarding normal State public notice procedures are outdated given the increased accessibility that technology has provided for virtual and telephonic meetings. States have shared that their residents benefitted from the States' opportunity to host public hearings and post-award forums virtually, and that they would like to continue doing so to facilitate attendance. States have also reported to the Departments that hosting meetings virtually during the COVID–19 PHE did not decrease the amount or quality of meaningful input received. States' experiences during this time demonstrated that interested parties were able to virtually attend meetings and submit public comments verbally or in-writing, and States did not report any significant issues relating to virtual platforms that impeded public attendance or participation. States continued to share with the Departments summaries of their post-award forums, as well as all public comments received and actions taken in response to concerns or comments, in accordance with section 1332 waiver annual reporting requirements. In States' new waiver applications, waiver extension requests, and waiver amendment requests, States also shared with the Departments summaries of virtually conducted hearings from their State public comment periods and addressed public comments or concerns received.

Beyond mitigating the spread of COVID–19, information shared by section 1332 waiver States has demonstrated that the opportunity to host post-award forums and public hearings on virtual platforms facilitated comparable or higher levels of public attendance when compared to previously held in-person meetings. For example, at Maryland's annual post-award forums held in 2019 (in-person) and 2020–2022 (virtual), the State saw comparable participation across the years from interested parties. Minnesota also reported comparable attendance at its post-award forums across the years: 4 attendees in 2018 (in-person), 1 in 2019 (in-person), 4 in 2020 (virtual), 9 in 2021 (virtual),[16] and 2 in 2022 (virtual). Likewise, Wisconsin had 6 attendees at its post-award forum in 2019 (in-person), 24 in 2020 (virtual),[17] 11 in 2021 (virtual), and 7 in 2022 (virtual). Wisconsin noted that using a virtual format has allowed individuals who would otherwise not be able to attend in-person to view the State's presentation and that this has proven to be a convenient means for individuals to attend the forum.

States that began waiver implementation after the start of the COVID–19 PHE have also reported successfully hosting virtual post-award forums. For example, Colorado conducted its first post-award forum entirely virtually in 2020 and reported 79 attendees.[18] Pennsylvania had 2 attendees at its first post-award forum in 2021 (virtual) and 4 in 2022 (virtual). Pennsylvania noted that due to the expansiveness of the State's geography, there has historically been low in-person attendance, as observed at its in-person public hearings in 2019 for its waiver application, where no members of the public attended the first meeting, and two members of the public attended the second meeting.

States submitting new waiver applications, waiver extension requests, or waiver amendment requests during the COVID–19 PHE also reported successfully conducting their public hearings on virtual platforms. For example, in January 2022, Alaska held a combined post-award forum and State public hearing for its waiver extension application both in-person and with a telephonic option, which 3 members of the public attended either in-person or virtually. In April 2022, Washington held two State public hearings virtually, in which 9 representatives from organizations attended and shared public comments.

There are other Federal programs and agencies that permitted a virtual option in place of in-person public hearings prior to the COVID–19 PHE or that have more recently amended their policies for public input to continue virtual and telephonic options that were first implemented during the COVID–19 PHE. For example, States that are applying for Medicaid section 1115 demonstrations are permitted to use telephonic and web-based conference capabilities for public meetings. In fact, per 42 CFR 431.408(a)(3), a State must use telephonic and/or web conference capabilities for at least one of the two required public hearings to ensure Statewide accessibility to the public hearing, unless it can document it has afforded the public throughout the State the opportunity to provide comment, such as holding the two public hearings in geographically distinct areas of the State.

As another example, during the COVID–19 PHE, the Internal Revenue Service (IRS) began holding public hearings on notices of proposed rulemaking telephonically instead of in-person. Following the end of the Federal COVID–19 PHE, the IRS recently announced that, for proposed regulations published in the **Federal Register** after May 11, 2023,[19] public hearings would be conducted in-person but that a telephonic option would remain available for those who prefer to attend or testify by telephone.

The Departments considered whether to propose requiring States to hold at least one of the required public hearings for waiver applications in-person. However, as explained above, States have successfully hosted post-award forums and public hearings for section 1332 waiver applications virtually to allow for meaningful public input over the last several years. Furthermore, by allowing States the ability to hold all of their meetings virtually, States may better allow for input across different geographies, communities, and populations. We also considered proposing the standard under section 1115 demonstrations where one hearing is required to be done virtually. However, given the successful hosting of virtual meetings with public participation by States for section 1332 waivers, it does not seem necessary to continue to require in-person meetings to solicit public input on section 1332 waivers.

The Departments believe that by allowing States the opportunity to hold post-award forums and public hearings virtually and through digital platforms, States would be able to continue

Recovery Order ended on April 27, 2023 (*https://hcpf.colorado.gov/covid-19-phe-planning*); in Georgia the State of Emergency ended on May 11, 2023 (*https://dph.georgia.gov/press-releases/2023-05-11/dph-news-release-end-public-health-emergency-declaration*); and in Rhode Island the State's COVID–19 Disaster Emergency ended on May 11, 2023 (*https://governor.ri.gov/executive-orders/executive-order-23-05*).

[16] Note that this post-award hearing was also a hearing for the State's waiver extension application, which likely increased attendance.

[17] Note that attendance was relatively higher in 2020 likely due to the forum following the State's first full year of implementing its reinsurance program.

[18] Note that this post-award forum was also a hearing for the State's waiver extension application, which likely increased attendance.

[19] Internal Revenue Service, Public Hearings on Proposed Regulations to Be Conducted in Person with Telephone Options Available, Announcement 2023–16. Accessed at *https://www.irs.gov/pub/irs-drop/a-23-16.pdf*.

facilitating attendance and participation from interested parties and the public to provide meaningful input. As such, the Departments are of the view that updating the State public notice procedures would enhance public participation in the section 1332 waiver review and monitoring process. This approach would help remove barriers to participation and increase opportunities for engagement in policymaking for communities and local partners who may face barriers to in-person participation (for example, those in rural areas). This approach is also consistent with Executive Order 14094, Executive Order on Modernizing Regulatory Review, as it would affirm States' abilities to be inclusive in seeking public input from interested or affected parties, including members of underserved communities, and promote best practices for information accessibility and engagement with interested or affected parties through the use of alternative platforms and media for engaging the public.[20] Further, this approach may improve States' abilities to understand and eliminate barriers experienced by underserved or under-represented communities, and identify opportunities to advance health equity, while diminishing administrative burden related to the integration of in-person and virtual formats.

Therefore, in this final rule, the Departments are finalizing as proposed that a virtual (that is, one that uses telephonic, digital, and/or web-based platforms) or hybrid (that is, one that provides for both in-person and virtual attendance) public hearing or forum be considered as the equivalent of holding an in-person meeting. In the 2012 Final Rule (77 FR 11700), the Departments noted that as set forth in 31 CFR 33.112(c)(1) and (2) and 45 CFR 155.1312(c)(1) and (2), a State must hold at least two public hearings in distinct locations. Under this policy, States would still need to hold at least two public hearings in distinct locations. For example, the Departments clarify that under this final rule, a State would not be permitted to count a public hearing in which there is simultaneously an in-person location and virtual platform as two hearings (or two locations). Instead, one virtual or hybrid meeting would still count as one public hearing, and two virtual or hybrid meetings would count as two public hearings.

In this final rule, we are finalizing as proposed in the 2025 Payment Notice proposed rule (88 FR 82510, 82520), to amend 31 CFR 33.112(c) and 45 CFR 155.1312(c) and 31 CFR 33.120(c) and 45 CFR 155.1320(c). More specifically, the Departments are finalizing modifications to 31 CFR 33.112(c) and 45 CFR 155.1312(c) to permit States to conduct public hearings in a virtual or hybrid format in lieu of conducting an in-person meeting. The Departments also finalize as proposed amending 31 CFR 33.120(c) and 45 CFR 155.1320(c) to provide that for a State's annual post-award forum, the public forum shall be conducted in an in-person, virtual (that is, one that uses telephonic, digital, and/or web-based platforms), or hybrid (that is, one that provides for both in-person and virtual attendance) format. These changes will go into effect upon publication of this final rule.

This policy is limited to allowing flexibility to host required meetings virtually. States would still be required to continue to abide by all other public notice requirements, including public notice procedural requirements for waiver applications, waiver extension and waiver amendment requests, and post-award forums. For example, States would still be required to have a process to consult and collaborate with Federally-recognized tribes,[21] as applicable, as well as take reasonable steps to provide meaningful access for individuals with limited English proficiency (LEP) (for example, language assistance services that may include interpretation in non-English languages provided in-person or remotely by a qualified interpreter, translated written content in paper or electronic form into or from languages other than English, and written notice of availability of language assistance services), and appropriate steps to ensure effective access for and communication with individuals with disabilities (for example, accessibility of information and communication technology).[22] States should recognize that virtual meetings may present additional accessibility challenges for people with communications and other disabilities, as well as to those who lack broadband access. Complying with the requirement to ensure effective communication may entail providing American Sign Language interpretation and real-time captioning, as well as ensuring that the virtual platform is interoperable with assistive technology for people with disabilities.

Finally, the Departments clarify that under this final rule, States shall have a process by which members of the public can request in-person meetings for the annual post-award forum or State public hearings on waiver applications, waiver extension requests, or waiver amendments requests, and that States shall accommodate those requests whenever possible. In addition, States with approved section 1332 waivers and States seeking approval for proposed waivers would continue to have flexibility to submit requests to the Departments during emergent situations to modify certain public participation requirements as set forth in 31 CFR 33.118(b)(1) through (5) and 45 CFR 155.1318(b)(1) through (5).

The Departments sought comment on these proposals and received 29 comments on the section 1332 waiver proposals from various interested parties, including States, health and disease advocacy organizations, general advocacy organizations, health care provider organizations, and research organizations. All comments generally expressed support for the proposed changes, though some raised additional considerations related to accessibility.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these provisions as proposed. We summarize and respond to public comments received on the proposed amendments to normal public notice requirements (31 CFR 33.112, 31 CFR 33.120, 45 CFR 155.1312, and 45 CFR 155.1320) below.

Comment: The Departments received comments supporting the additional flexibilities for States to conduct public hearings and post-award forums in a virtual or hybrid format. Commenters agreed that these updates would facilitate public participation on section 1332 waivers by increasing access to meetings for people who would otherwise face barriers to attending in-person meetings (for example, due to geographic distance, transportation, childcare, limited mobility, chronic health conditions). Commenters also agreed with the Departments' clarification that one meeting held in a hybrid format does not meet the existing requirement that States hold at least two such events in separate locations, and that States would still need to hold at least two public hearings in distinct locations (for example, one virtual or hybrid meeting counts as one meeting, and two virtual or hybrid meetings count as two meetings).

[20] 88 FR 21879. *https://www.govinfo.gov/content/pkg/FR-2023-04-11/pdf/2023-07760.pdf.*

[21] See 31 CFR 33.112(a)(2) and 45 CFR 155.1312(a)(2).

[22] See Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d, 45 CFR part 80), Section 1557 of the ACA (42 U.S.C. 18116, 45 CFR part 92), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C 794, 45 CFR part 84), and Title II of the Americans with Disabilities Act (42 U.S.C. 1213 *et seq.*, 28 CFR part 35).

Several comments from States shared their own positive experiences with hosting public hearings and post-award forums virtually during the COVID–19 pandemic. They explained that public participation did not suffer because the meetings were held virtually. These States also noted that the ability to hold virtual public hearings and post-award forums without needing to request a modification from the normal public notice requirements due to an emergent situation (as they would have done under previous guidance) would reduce administrative hurdles. However, one State asserted that there is no benefit from requiring States to hold public forums in-person and that it is an inefficient use of State resources.

Response: The Departments appreciate the support and have finalized the rule as proposed.

Comment: We received several comments expressing concern that virtual or hybrid meetings may simultaneously pose additional challenges for States to comply with Federal civil rights protections and requirements for accessibility. These commenters voiced concern that people with disabilities, people with LEP, and people with limited broadband access may experience barriers to participation. These commenters encouraged the Departments to issue additional subregulatory guidance to States that clarify related Federal civil rights protections and requirements and to provide examples of compliance strategies to ensure that people with accessibility needs can meaningfully participate in the public comment process. Similarly, one commenter recommended that CMS include in the final rule accessibility standards for virtual and hybrid meetings, such as practices related to pre-event information, live captioning, assistive technology, and document and platform accessibility; and another commenter proposed that the Departments codify essential accessibility practices in the final rule, such as closed captioning, simultaneous interpretation, option to dial in to meetings, and ensuring that the technology used is compatible with assistive technologies used by people with disabilities. Finally, one commenter recommended that the Departments require States to include a virtual option when public hearings are held in-person, which would allow for participation from people who cannot safely attend in-person (for example, people who are immunocompromised). This commenter also requested that States posting public notice for these meetings should ensure the notices are easily accessible and prominently displayed on their websites.

Response: The Departments agree with commenters that despite the additional flexibilities for States to host meetings in a virtual or hybrid format, it continues to be important for States to comply with applicable Federal civil rights law and ensure accessibility in the public notice and comment process. Regarding commenters' suggestion that the Departments issue additional subregulatory guidance and provide examples of compliance strategies, or to codify accessibility standards and practices into the final rule, we emphasize that the finalization of these provisions does not change requirements for States to ensure Federal civil rights protections and meet applicable accessibility needs. Indeed, in the 2021 Final Rule, the Departments reiterated that any public participation processes must comply with applicable Federal civil rights laws.[23] The Departments expect that States will continue to take accessibility considerations into account to ensure a meaningful level of public input during State notice and comment periods and post-award forums. States may reference the HHS Office for Civil Rights for information on Federal civil rights laws and protections.[24] Additionally, comments on issuing subregulatory guidance and codifying accessibility standards and practices are not directly in response to the proposed rule and are out-of-scope. As such we have finalized this rule as proposed.

Finally, the Departments remind States that they must publish the date, time, and location of the public forum in a prominent location on the State's public website, at least 30 days prior to the date of the planned public forum. Consistent with Federal civil rights law, including section 1557 of the ACA, section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act, section 1332 waiver applications must be accessible to individuals with disabilities, including when such applications are posted online. To assist with ensuring website accessibility, States may look to national standards issued by the Architectural and Transportation Barriers Compliance Board (often referred to as ''section 508 standards''),[25] or alternatively, to standards issued by the World Wide Web Consortium's (W3C).[26]

Comment: One commenter who supported the proposed provisions also encouraged the Departments to consider the benefits of in-person meetings by gathering feedback from States to provide guidance on best practices, as in-person meetings may offer a greater level of participant engagement compared to virtual meetings (for example, in-person public testimonies during the State legislative process can have more meaningful impact than virtual testimonies).

Response: As noted in the proposed rule, the Departments considered whether to propose requiring States to hold at least one of the required public hearings for waiver applications in-person. Some States had previously expressed to the Departments and in public comments on this proposed rule that they appreciated the flexibility to virtually conduct public hearings and forums. As demonstrated over the last several years, States have successfully hosted post-award forums and public hearings for section 1332 waiver applications virtually to allow for meaningful public input. Furthermore, States continue to have the option to conduct all public hearings or post-award forums in-person. We encourage States to consider where other opportunities for consumer involvement exist. We believe that the proposed State and Federal public notice and comment processes, along with the post-award public forum provision, ensure meaningful opportunities for participation.

Comment: One commenter suggested that the Departments provide flexibility on whether or not to conduct post-award forums due to what the commenter asserts is a lack of statutory authority, a history of low attendance at post-award forums, the belief that this input could be gathered at a much lower cost with written comments, and the view that the forums are duplicative of other State evaluation processes.

Response: The Departments require post-award forums under their authority under section 1332 (a)(4)(B)(iv) and (v), 31 CFR 33.120, and 45 CFR 155.1320 to require States to submit periodic reports and conduct periodic evaluations to monitor States' compliance with Federal and regulatory requirements for section 1332 waivers. Further, we believe that the public should have an opportunity

[23] Patient Protection and Affordable Care Act; Updating Payment Parameters, Section 1332 Waiver Implementing Regulations, and Improving Health Insurance Markets for 2022 and Beyond (86 FR 53412, 53457) *https://www.govinfo.gov/content/pkg/FR-2021-09-27/pdf/2021-20509.pdf.*

[24] *https://www.hhs.gov/civil-rights/for-individuals/index.html.*

[25] For more information on section 508 standards, see *https://www.section508.gov/develop/web-content/.*

[26] For more information, see *https://www.w3.org.*

to comment at a post-award public forum as reflected in 31 CFR 33.120(c) and 45 CFR 155.1320(c) and note that the requirement for a post-award forum is part of the periodic monitoring and evaluation of waivers. This comment is outside the scope of this rulemaking.

B. 42 CFR Parts 435 and 600

1. Increase State Flexibility in the Use of Income and Resource Disregards for Non-MAGI Populations (42 CFR 435.601)

In the proposed rule, we proposed to provide States with greater flexibility to adopt income and/or resource disregards in determining financial eligibility under section 1902(r)(2) of the Act for individuals excepted from application of modified adjusted gross income financial methodologies (''MAGI-based methodologies'').

Specifically, we proposed to remove the current 42 CFR 435.601(d)(4), which was first adopted in 1993. As explained in the preamble to the proposed rule, the current rule describes the eligibility groups to which States may apply less restrictive methodologies and requires that any less restrictive methodologies elected by a State be ''comparable for all persons within each category of assistance within an eligibility group.'' As further explained in 42 CFR 435.601(d)(4), for example, if the agency chooses to apply a less restrictive income or resource methodology to an eligibility group of aged individuals, it must apply that methodology to all aged individuals within the selected group.

In the preamble to the proposed rule, we noted that, upon further review, we recognize that section 1902(r)(2)(A) of the Act does not expressly impose a comparability mandate, and that we did not identify a specific legal rationale for the mandate when we originally proposed and finalized 42 CFR 435.601(d)(4), 54 FR 39421, 39433 (September 26, 1989); 58 FR 4908, 4919 (January 19, 1993). We thus concluded that the inclusion of the mandate was a policy choice. We further considered that section (3)(b) of the Sustaining Excellence in Medicaid Act of 2019, Public Law 116–39, permits States to target income and/or resource disregards to people who need home and community-based services (HCBS).[27] In light of this analysis, and given that States over the years have expressed interest in targeting income and/or resource disregards to subpopulations within eligibility groups, we proposed to eliminate paragraph (4) from 42 CFR 435.601(d).

We explained that we believed that eliminating this provision would: increase State flexibility; provide States more options to extend eligibility to specific populations based on a State's circumstances; and enable States to achieve targeted expansions of coverage that best meet their needs, in contrast to the all-or-nothing approach for income and resource disregards that is effectively required by 42 CFR 435.601(d)(4). We acknowledged, however, that it was possible that eliminating the comparability requirement from 42 CFR 435.601(d)(4) might enable a State to narrow an existing disregard that is broadly available to an eligibility group at present to discrete members of the group instead. We indicated that we had not received inquiries from States on the permissibility of such an approach, and that we believed States would utilize the elimination of 42 CFR 435.601(d)(4) to expand eligibility. We invited comment on our proposal.

Comment: We received many comments on our proposal. A majority of the commenters expressed either conditional or outright support for the proposal. Commenters agreed that the proposal would increase State flexibility and facilitate targeted expansions of Medicaid coverage. Commenters also indicated that the proposal would foster State development of innovative pathways to Medicaid eligibility and help low-income and vulnerable populations. Many commenters also agreed that States would most likely use the flexibility to increase Medicaid eligibility.

However, many commenters who expressed support for the proposal (and some who opposed it) emphasized that, as the proposal leaves open the possibility that States could use the offered flexibility to narrow existing disregards, CMS should impose ''safeguards,'' ''guardrails,'' or ''no-harm'' requirements that would effectively prohibit the States' use of the flexibility in this manner. Some of these commenters noted that the proposal should not be finalized without these requirements. A number of commenters suggested that States' exercise of the flexibility be closely monitored, with one recommending that the proposal, if finalized, should be reexamined if States use it in a manner that adversely affects beneficiaries. A few commenters suggested that we were underestimating the likelihood of States using the additional flexibility to reduce eligibility, and that, as an example, such a course of action might be attractive for States facing budget pressure.

Response: We appreciate the support we received for the general concept of providing States with additional flexibility in this area. However, given the significant concerns and comments that we received, we have decided that we should consider this proposal further and any necessary beneficiary protections, and we are not finalizing it at this time. As we indicated in the preamble to the proposed rule, we believe the proposal would provide States more options to extend eligibility. It is not our intent, however, to offer methods by which States may be likely to reduce it in practice or otherwise harm beneficiaries. We therefore intend to further evaluate the comments regarding the additional flexibility we proposed for States. We will consider the commenters' recommendations regarding the use of ''guardrails,'' or other beneficiary protections as well as the need for other modifications to our proposal that would address these commenters' concerns regarding adequate beneficiary protections in a proposal in the future.

Comment: Many commenters who supported the proposal specifically noted its potential to benefit ''at-risk'' or ''vulnerable'' populations, people 65 years old and older, people with blindness or disabilities, ''dually eligible'' individuals, and prospective medically needy individuals. Commenters also indicated that the proposal could: allow States to develop innovative pathways to Medicaid eligibility; potentially ease the application process for applicants and thereby allow access to coverage more quickly; stabilize coverage for individuals who may experience minor changes in income and/or resources that might otherwise render them ineligible; and possibly produce important information about current eligibility barriers that could lead to broader reforms. One commenter suggested that the flexibility offered by the proposal would be a ''commonsense change'' that would allow States both to improve care for non-MAGI populations and address ''nonsensical, unintended situations that have resulted from different eligibility groups having different income and resource limits.''

Response: We agree that the proposal could benefit the various populations described in these comments. We also agree that the proposal could facilitate State innovation in expanding Medicaid eligibility pathways and support more seamless transitions between eligibility groups. As explained above, however,

[27] For further information, see CMS State Medicaid Director Letter 21–004, ''State Flexibilities to Determine Financial Eligibility for Individuals in Need of Home and Community-Based Services.'' *https://www.medicaid.gov/sites/default/files/2021-12/smd21004_0.pdf.*

we are continuing to consider the comments we received and are not finalizing the proposal at this time.

Comment: We received many comments that raised concerns with States using the additional flexibility offered by the proposal to reduce existing disregards. Nearly all commenters who raised these concerns recommended that, if we finalized the proposal, we should prohibit States from reducing or narrowing existing disregards for portions of eligibility groups. Some commenters also suggested that the regulatory text, if the proposal is finalized, should require that any targeting criteria be both grounded on a sound rationale and not discriminate based on race, gender, sexual orientation, disability, age, or health condition. A few other commenters recommended that, at the very least, we should include in the regulation a requirement that individuals who may lose eligibility due to a State reducing or narrowing existing disregards be offered a ''transitional period'' so that they are not immediately terminated and instead have time to potentially conform to new eligibility rules. A few commenters questioned the legal basis for our proposed change.

Response: We appreciate this input. As we noted in the preamble to the proposed rule, State inquiries on the scope of the comparability rule in 42 CFR 435.601(d)(4) have generally centered on ideas on how to expand eligibility instead of reducing it. However, as we explained above, we are not finalizing our proposal at this time in order to further consider our proposal in light of these comments.

Comment: A few commenters raised operational concerns about implementation of our proposal. A few others expressed concern that we should obtain additional input from interested parties before moving forward with our proposal. We also received comments not directly related to the proposal, such as comments asserting a need for periodic adjustments in resource standards and for working with States to identify the most appropriate resource standards for different Medicaid populations.

Response: We appreciate this input. As explained above, we are not finalizing our proposal at this time to further consider our proposal considering the comments received on the proposal.

2. Changes to the Basic Health Program Regulations (42 CFR 600.320)

Section 1331 of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (Pub. L. 111–152, enacted March 30, 2010), provides States with the option to operate a Basic Health Program (BHP). In the States that elect to operate a BHP, the State's BHP makes affordable health benefits coverage available for lawfully present individuals under age 65 with household incomes between 133 and 200 percent of the Federal poverty level (FPL) (or in the case of a lawfully present non-citizen, ineligible for Medicaid or the Children's Health Insurance Program (CHIP) due to immigration status, with household incomes between zero and 200 percent of the FPL) who are not eligible for Medicaid, CHIP, or other minimum essential coverage. As of the date of this final rule, only Minnesota is implementing a BHP. Oregon has submitted a Blueprint with a proposed BHP implementation date of July 1, 2024.

Under current 42 CFR 600.320(c), States must establish a uniform method of determining the effective date of eligibility for enrollment in a standard health plan followingeitherthe Medicaid process at42 CFR 435.915exclusive of42 CFR 435.915(a) or the Exchange standards at45 CFR 155.420(b)(1).

Although the current BHP regulation provides States with some flexibility in establishing an effective eligibility date for enrollment, it does not permit a State to select an effective date of coverage standard for eligible individuals as of the first day of the month following the month of application or eligibility determination regardless of when they apply or are found eligible to enroll in a standard health plan in the BHP. We believe eligible individuals should have access to coverage as soon as feasible.

While the Medicaid process at 42 CFR 435.915,exclusive of paragraph (a), allows for a State operating a BHP to have the earliest possible effective date for its enrollees, we understand that some States may have operational or regulatory constraints that do not allow them to follow the Medicaid process, but may be able to implement an effective date for all eligible applicants the first day of the month after the month in which the eligibility determination is made, regardless of which day of the month such determination occurs.

We are finalizing the proposed rule to revise § 600.320(c) to add a third option at paragraph (c)(3) that would allow a State operating a BHP to establish an effective date of eligibility for enrollment for all enrollees on the first day of the month following the month in which BHP eligibility is determined. Under § 600.320(c)(1), States would continue to have the option to follow the Exchange standards at 45 CFR 155.420(b)(1), and under 42 CFR 600.320(c)(2), a State may follow Medicaid standards at 42 CFR 435.915 exclusive of paragraph (a).

We sought comment on the proposed additional option for determining the effective date of eligibility for enrollment in a standard health plan as well as an alternative option of allowing a State to establish its own uniform effective date policy.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with the following modifications: we are adding § 600.320(c)(4) to specify that subject to HHS approval, a State may establish its own effective date of eligibility for enrollment policy as long as it is (1) no later than the first day of the second month following the date that an individual has been determined BHP-eligible; and (2) no more restrictive than § 600.320(c)(1) through (3). We summarize and respond to public comments received on the proposed BHP effective date policy below.

Comment: Many comments supported the additional flexibility for States operating a BHP to follow an effective date of eligibility for enrollment on the first day of the month following the month in which BHP eligibility is determined.

Response: We appreciate the comments supporting our proposal, and for reasons discussed below, we are finalizing the regulation changes as proposed with only minor modifications.

Comment: A few commenters supported an option to allow a State to establish its own effective date of eligibility policy, which we had sought comment on.

Response: We appreciate the comments and agree that individual States' needs should be taken into account. Therefore, we are adding an option that allows a State to establish its own effective date of eligibility for enrollment policy. We have added § 600.320(c)(4), which specifies that subject to HHS approval, a State may establish its own effective date of eligibility policy. We specify that a State-developed effective date must be no later than the first date of the second month following the date that an individual has been determined BHP-eligible. In addition, the effective date of eligibility for enrollment must be no more restrictive than § 600.320(c)(1) through (3). This effective date policy should provide greater flexibility for a State to meet its own population's needs

and not cause delays in coverage. We expect this request to be submitted via a Blueprint revision.

Comment: One commenter questioned our discussion of the intersection of premium payments and enrollment in a BHP. The commenter was concerned that we were suggesting that the proposed option at § 600.320(c)(3) would require enrollment after an eligibility determination was made, regardless of whether a premium payment was received.

Response: This regulation sets out the allowable effective dates of coverage but does not describe all of the processes surrounding enrollment of an individual into coverage. The lack of mention of premium payment was not intended to preclude a State from requiring premium payments prior to enrollment. States may require payment of premiums prior to enrolling an individual into BHP. A State that wishes to be particularly clear about its enrollment policies may adopt the option under § 600.320(c)(4) and specify in the BHP Blueprint that it is providing additional time to account for a BHP-individual to pay a premium.

C. 45 CFR Part 153—Standards Related to Reinsurance, Risk Corridors, and HHS Risk Adjustment

In subparts A, B, D, G, and H of part 153, we established standards for the administration of the risk adjustment program. The risk adjustment program is a permanent program created by section 1343 of the ACA that transfers funds from lower-than-average risk, risk adjustment covered plans to higher-than-average risk, risk adjustment covered plans in the individual, small group markets, or merged markets, inside and outside the Exchanges. In accordance with § 153.310(a), a State that is approved or conditionally approved by the Secretary to operate an Exchange may establish a risk adjustment program or have HHS do so on its behalf.[28] HHS did not receive any requests from States to establish and operate a risk adjustment program for the 2025 benefit year. Therefore, HHS will operate risk adjustment in every State and the District of Columbia for the 2025 benefit year.

1. Sequestration

In accordance with the OMB Report to Congress on the Joint Committee Reductions for Fiscal Year 2024, the HHS-operated risk adjustment program is subject to the fiscal year 2024 sequestration.[29] The Federal Government's 2024 fiscal year began on October 1, 2023. Therefore, the HHS-operated risk adjustment program will be sequestered at a rate of 5.7 percent for payments made from fiscal year 2024 resources (that is, funds collected during the 2024 fiscal year).

HHS, in coordination with OMB, has determined that, under section 256(k)(6) of the Balanced Budget and Emergency Deficit Control Act of 1985,[30] as amended, and the underlying authority for the HHS-operated risk adjustment program, the funds that are sequestered in fiscal year 2024 from the HHS-operated risk adjustment program will become available for payment to issuers in fiscal year 2025 without further Congressional action. If Congress does not enact deficit reduction provisions that replace the Joint Committee reductions, the program would be sequestered in future fiscal years, and any sequestered funding would become available in the fiscal year following that in which it was sequestered.

Additionally, we note that the Infrastructure Investment and Jobs Act[31] amended section 251A(6) of the Balanced Budget and Emergency Deficit Control Act of 1985 and extended sequestration for the HHS-operated risk adjustment program through fiscal year 2031 at a rate of 5.7 percent per fiscal year.[32]

After consideration of the comment and for the reasons outlined in the proposed rule, the HHS-operated risk adjustment program will sequester payments made from fiscal year 2024 resources at a rate of 5.7 percent. We summarize and respond to the public comment received on the fiscal year 2024 sequestration rate below.

Comment: One commenter acknowledged the sequestration rate for the HHS-operated risk adjustment program.

Response: The HHS-operated risk adjustment program will sequester payments made from fiscal year 2024 resources at a rate of 5.7 percent.

2. HHS Risk Adjustment (§ 153.320)

The HHS risk adjustment models predict plan liability for an average enrollee based on that person's age, sex, and diagnoses (also referred to as hierarchical condition categories (HCCs)), producing a risk score. The HHS risk adjustment methodology utilizes separate models for adults, children, and infants to account for clinical and cost differences in each age group. In the adult and child models, the relative risk assigned to an individual's age, sex, and diagnoses are added together to produce an individual risk score. Additionally, to calculate enrollee risk scores in the adult models, we added enrollment duration factors beginning with the 2017 benefit year,[33] and prescription drug categories (RXCs) beginning with the 2018 benefit year.[34] Starting with the 2023 benefit year, we removed the severity illness factors in the adult models and added interacted HCC count factors (that is, additional factors that express the presence of a severity or transplant HCC in combination with a specified number of total payment HCCs or HCC groups on the enrollee's record) to the adult and child models[35] applicable to certain severity and transplant HCCs.[36]

Infant risk scores are determined by inclusion in one of 25 mutually exclusive groups, based on the infant's maturity and the severity of diagnoses. If applicable, the risk score for adults, children, or infants is multiplied by a cost sharing reduction (CSR) adjustment factor. The enrollment-weighted average risk score of all enrollees in a particular risk adjustment covered plan (also referred to as the plan liability risk score (PLRS)) within a geographic rating area is one of the inputs into the State payment transfer formula,[37] which determines the State transfer payment or charge that an issuer will receive or be required to pay for that plan for the applicable State market risk pool for a given benefit year. Thus, the HHS risk

[28] See also 42 U.S.C. 18041(c)(1).

[29] Office of Management and Budget. (2023, March 13). OMB Report to the Congress on the BBEDCA 251A Sequestration for Fiscal Year 2024. *https://www.whitehouse.gov/wp-content/uploads/2023/03/BBEDCA_Sequestration_Report_and_Letter_3-13-2024.pdf.*

[30] Public Law 99–177 (1985).

[31] Public Law 117–58, 135 Stat. 429 (2021).

[32] 2 U.S.C. 901a.

[33] For the 2017 through 2022 benefit years, there is a set of 11 binary enrollment duration factors in the adult models that decrease monotonically from one to 11 months, reflecting the increased annualized costs associated with fewer months of enrollments. See, for example, 81 FR 94071 through 94074. These enrollment duration factors were replaced beginning with the 2023 benefit year with HCC-contingent enrollment duration factors for up to 6 months in the adult models. See, for example, 87 FR 27228 through 27230.

[34] For the 2018 benefit year, there were 12 RXCs, but starting with the 2019 benefit year, the two severity-only RXCs were removed from the adult models. See, for example, 83 FR 16941.

[35] See Table 1 for a list of factors in the adult models, and Table 2 for a list of factors in the child models.

[36] See 87 FR 27224 through 27228.

[37] The State payment transfer formula refers to the part of the Federally certified risk adjustment methodology that applies in States where HHS is responsible for operating the program. The formula calculates payments and charges at the State market risk pool level (prior to the calculation of the high-cost risk pool payment and charge terms that apply beginning with the 2018 benefit year). See, for example, 81 FR 94080.

adjustment models predict average group costs to account for risk across plans, in keeping with the Actuarial Standards Board's Actuarial Standards of Practice for risk classification.

a. Data for HHS Risk Adjustment Model Recalibration for the 2025 Benefit Year

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82527), we proposed to recalibrate the 2025 benefit year HHS risk adjustment models with the 2019, 2020, and 2021 enrollee-level EDGE data. In the proposed rule, we explained the history of recalibrating the risk adjustment models with enrollee-level EDGE data and why we use three years of blended data for recalibration.[38] Given this history and reasoning, we proposed to determine coefficients for the 2025 benefit year based on a blend of separately solved coefficients from the 2019, 2020, and 2021 benefit years' enrollee-level EDGE data, with the costs of services identified from the data trended between the relevant year of data and the 2025 benefit year.[39] The coefficients listed in Tables 1 through 6 reflect the use of trended 2019, 2020, and 2021 benefit year enrollee-level EDGE data, as well as other HHS risk adjustment model updates finalized in this final rule (including, for example, the pricing adjustment for Hepatitis C drugs).

We sought comment on the proposal to determine 2025 benefit year coefficients for the HHS risk adjustment models based on a blend of separately solved coefficients from the 2019, 2020, and 2021 enrollee-level EDGE data.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this approach as proposed. We summarize and respond to public comments received on the proposed enrollee-level EDGE data to be used for HHS risk adjustment model recalibration for the 2025 benefit year below.

Comment: A few commenters supported utilizing the 2019, 2020, and 2021 enrollee-level EDGE data to recalibrate the risk adjustment models for the 2025 benefit year as proposed. Other commenters opposed using these years of enrollee-level EDGE data due to concerns about the impact of the COVID–19 PHE on 2020 and 2021 benefit year enrollee-level EDGE data.

Response: We are finalizing the use of the 2019, 2020, and 2021 enrollee-level EDGE data to recalibrate the 2025 risk adjustment models as proposed. As detailed further below, our analyses found the 2020 and 2021 benefit year enrollee-level EDGE data is sufficiently similar to prior years of enrollee-level EDGE data such that exclusion of these data years from the risk adjustment model recalibration is not warranted.

We recognize that if a benefit year of enrollee-level EDGE data has significant changes that differentially impact certain conditions or populations relative to others or is sufficiently anomalous relative to expected future patterns of care, we should carefully consider what impact that benefit year of data could have if it is used in the annual model recalibration for the HHS-operated risk adjustment program.[40] This includes consideration of whether to exclude or adjust that benefit year of data to increase the models' predictive validity or otherwise limit the impact of anomalous trends. For this reason, we conducted extensive analysis on the 2020 benefit year enrollee-level EDGE data to consider its inclusion in the recalibration of the 2024 benefit year risk adjustment models. In the 2024 Payment Notice proposed rule[41] and final rule[42] we discussed our analysis of the 2020 benefit year data to identify possible impacts of the COVID–19 PHE.[43] Likewise, when we were developing the proposal for recalibration of the 2025 benefit year risk adjustment models, we conducted similar analyses on the 2021 benefit year enrollee-level EDGE data as we did to the 2020 benefit year enrollee-level EDGE data to examine the potential impact of the COVID–19 PHE. We did not find any notable anomalous trends, especially when considering that every year of data can be unique, and therefore, some level of deviation from year to year is expected. Specifically, our analysis found:

- The total sample size in the recalibration data set was similar between the 2019, 2020, and 2021 benefit years, with the individual market at the national level seeing an increase in enrollment in the 2021 benefit year and the small group market at the national level seeing a slight decrease in enrollment in the 2021 benefit year.
- In the 2021 EDGE enrollee-level recalibration data set, PMPM spending increased substantially relative to the 2020 benefit year. The increased percentage was similar for institutional and professional services, preventive services, and drugs. While the year-over-year increase was larger than usual, the 2-year increase in spending between 2019 and 2021 was more consistent with historical trends. For both 2020 and 2021, year-over-year spending changes were consistent across enrollee risk factors and thus did not skew the relative factors used in the HHS risk adjustment models.
- Across all data submitted through issuer's EDGE servers between 2019 to 2020 benefit years for enrollees in our recalibration sample, there was a 3,681 percent increase in claims with telehealth services, whereas between the 2020 and 2021 benefit years, we observed a 1.25 percent increase in claims with telehealth services. Thus, use of telehealth services remained much higher in the 2021 benefit year than in the 2019 benefit year. While it is likely the continued higher use of telehealth services in 2021 was in part a response to the ongoing COVID pandemic in 2021, it is also at least in part due to changes in patterns of care that can be expected to continue into future benefit years. We therefore expect that the use of telehealth services may continue at a level somewhere between the higher levels observed in the 2020 and 2021 benefit years and the lower 2019 benefit year levels in the 2025 benefit year, as would be appropriately reflected by including all three data years in the 2025 EDGE data recalibration.
- The percentage of enrollees with one or more HCCs was similar between the 2019 and 2020 benefit year enrollee-level EDGE recalibration data. The percentage of enrollees with one or more HCC increased slightly between the 2020 and 2021 benefit year enrollee-level EDGE recalibration data sets in

[38] 88 FR 82510 at 82527 through 82528.

[39] As described in the 2016 Risk Adjustment White Paper (*https://www.cms.gov/cciio/resources/forms-reports-and-other-resources/downloads/ra-march-31-white-paper-032416.pdf*) and the 2017 Payment Notice (81 FR 12218), we subdivide expenditures into traditional drugs, specialty drugs, medical services, and preventive services and determine trend factors separately for each category of expenditure. In determining these trend factors, we consult our actuarial experts, review relevant Unified Rate Review Template (URRT) submission data, analyze multiple years of enrollee-level EDGE data, and consult National Health Expenditure Accounts (NHEA) data as well as external reports and documents published by third parties. In this process, we aim to determine trends that reflect changes in cost of care rather than gross growth in expenditures. As such, we believe the trend factors we used for each expenditure category for the 2025 benefit year are appropriate for the most recent changes in cost of care that we have seen in the market.

[40] Since the start of model calibration for the HHS risk adjustment models in benefit year 2014, the COVID–19 PHE has been the only such situation to date. Other events and policy changes have not risen to the same level of uniqueness or impact.

[41] 87 FR 78214 through 78218.

[42] 88 FR 25749 through 25754.

[43] This analysis included assessing how the 2020 benefit year enrollee-level EDGE recalibration data compares to 2019 benefit year enrollee-level EDGE recalibration data.

both the recalibration and full data sets, as is the usual historical trend.

• Individual HCC frequencies and costs generally remained stable between the 2019, 2020, and 2021 benefit year enrollee-level EDGE recalibration data sets, even for the HCCs related to the severe manifestations of COVID–19. One exception was a notable increase in frequency for HCC 127 *Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes,* which was likely coded for cases in which acute respiratory distress syndrome (ARDS) was a manifestation of COVID–19, but relative allowed charges, and therefore, risk adjustment model coefficients, for HCC 127 (Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes) remained similar in 2021 compared to 2019 and 2020. We expect that as least some severe manifestations of COVID–19 are likely to continue to occur through the 2025 benefit year and those enrollees would continue to receive HCC 127 (Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes).

• RXC frequencies and costs were generally stable between the 2019, 2020, and 2021 benefit year enrollee-level EDGE recalibration data sets, with the exception of RXC 10 *Cystic Fibrosis Agents,* for which a new drug was introduced that increased costs in the 2020 and 2021 data compared to the 2019 data. We expect the continued use of this new drug to cause RXC 10 (Cystic Fibrosis Agents) costs to remain at the higher levels reflected in the 2020 and 2021 benefit years through the 2025 benefit year.

• The coefficients for the 2021 benefit year enrollee-level EDGE recalibration data are similar to the 2019 and 2020 benefit year's coefficients and are consistent with typical changes in coefficients for new years of data. A major benefit of blending separately solved models across three benefit years of data (that is, 2019, 2020, and 2021) is that unique features specific to one benefit year are captured but not over-emphasized.

Thus, after analyzing our results, we concluded there were no significant anomalies in the 2021 benefit year enrollee-level EDGE data to warrant precluding its inclusion from the 2025 benefit year HHS risk adjustment model recalibration. This is consistent with how we ultimately concluded there were no significant anomalies in the 2020 benefit year enrollee-level EDGE data to warrant precluding its inclusion from risk adjustment model recalibration.[44] In fact, the analysis we conducted confirmed that its inclusion was within the range of previous year-to-year coefficient changes, and that many of the changes observed are likely to persist through the 2025 benefit year, as intended when transitioning to more recent years of data in model recalibration. Further, the blending of the coefficients from the separately solved models for benefit years 2020 and 2021, with benefit year 2019, also helps promote stability and we believe would sufficiently account for any differences resulting from the COVID–19 PHE.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments above, we are finalizing the approach for recalibrating the HHS risk adjustment models for the 2025 benefit year as proposed. The model coefficients for the 2025 benefit year listed in Tables 1 through 6 of this final rule are based on a blend of equally-weighted, separately solved coefficients from the 2019, 2020, and 2021 benefit years of enrollee-level EDGE data for all coefficients.

b. Pricing Adjustment for the Hepatitis C Drugs

For the 2025 benefit year, we proposed to continue applying a market pricing adjustment to the plan liability associated with Hepatitis C drugs in the HHS risk adjustment models.[45] Since the 2020 benefit year HHS risk adjustment models, we have been making a market pricing adjustment to the plan liability associated with Hepatitis C drugs to reflect future market pricing prior to solving for coefficients for the models.[46] The purpose of this market pricing adjustment is to account for significant pricing changes between the data years used for recalibrating the models and the applicable benefit year of risk adjustment as a result of the introduction of new and generic Hepatitis C drugs.[47]

We sought comment on our proposal to apply a market pricing adjustment to the plan liability associated with Hepatitis C drugs for the 2025 benefit year.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this adjustment as proposed. We summarize and respond to public comments received on the proposed pricing adjustment for Hepatitis C drugs below.

Comment: A few commenters supported the proposed Hepatitis C pricing adjustment in the risk adjustment models and noted that a pricing adjustment was still warranted for Hepatitis C drugs. Other commenters expressed concern about the Hepatitis C pricing adjustment and cautioned against reducing the Hepatitis C RXC coefficient more than the expected decrease in cost as reducing the coefficient in such a manner may incentivize issuers to reduce the availability of treatment.

Response: We agree with commenters that continuing to apply the Hepatitis C pricing adjustment in the 2025 benefit year HHS risk adjustment models remains appropriate and are finalizing the Hepatitis C pricing adjustment as proposed. As discussed in the proposed rule, as part of the 2025 benefit year model recalibration analysis, we reassessed the cost trend for Hepatitis C drugs using available enrollee-level EDGE data (including 2021 benefit year data) to consider whether the adjustment was still needed and if it is still needed, whether it should be modified. Specifically, although generic Hepatitis C drugs became available on the market in 2019, and therefore were available for all 3 years of data (2019–2021) used for the 2025 benefit year model recalibration, our analysis of the data continued to observe that costs for Hepatitis C drugs are not increasing at the same rate as other drug costs between the recalibration data years and the applicable benefit year of risk adjustment, likely due to continued increases in the proportion of Hepatitis C drug prescriptions for generic versions of the drugs. As such, we do not believe that the trends used to reflect growth in the prescription drug costs due to inflation and related factors for recalibrating the models would appropriately reflect the average cost of Hepatitis C treatments expected in the 2025 benefit year. Therefore, we believe a market pricing adjustment specific to Hepatitis C drugs in the HHS risk adjustment models for the 2025 benefit year is necessary to account for the lack of growth in Hepatitis C drug prices relative to other prescription drugs in the market between the data years used for recalibrating the models and the

[44] 87 FR 25749 through 25754.

[45] See, for example, 84 FR 17463 through 17466.

[46] The Hepatitis C drugs market pricing adjustment to plan liability is applied for all enrollees taking drugs mapped to RXC 2: Anti-Hepatitis C (HCV) Agents, Direct Acting Agents in the data used for recalibration.

[47] Silseth, S., & Shaw, H. (2021). Analysis of prescription drugs for the treatment of hepatitis C in the United States. Milliman White Paper. *https://www.milliman.com/-/media/milliman/pdfs/2021-articles/6-11-21-analysis-prescription-drugs-treatment-hepatitis-c-us.ashx.*

applicable benefit year of risk adjustment due to the introduction of new and generic Hepatitis C drugs in recent years. In making this determination, HHS consulted its actuarial experts and analyzed the most recent enrollee-level EDGE data available to further assess the changing costs associated with Hepatitis C enrollees. In developing the Hepatitis C RXC pricing adjustment for the 2025 benefit year, we considered that we had moved into the data years (2019–2021) under which the generic Hepatitis C drugs were available in the market for all of the data years used for model recalibration, and therefore, to avoid over-adjusting the Hepatitis C RXC, our pricing adjustment for the 2025 benefit year does not reduce the coefficient as much as prior benefit years. Instead, our pricing adjustment trends the Hepatitis C drugs at a lower rate than the other prescription drugs in the risk adjustment models to reflect the lack of cost increases observed in the Hepatitis C drugs in 2021.

Thus, we believe that the Hepatitis C pricing adjustment we are finalizing accurately captures the anticipated costs of Hepatitis C drugs for the 2025 benefit year using the most recently available enrollee-level EDGE data, balances the need to deter gaming practices with the need to ensure that issuers are adequately compensated, and does not undermine recent progress in the treatment of Hepatitis C. We intend to continue to reassess this pricing adjustment as part of future benefit years' model recalibrations using additional years of available enrollee-level EDGE data and plan to propose phasing out the market adjustment if and when appropriate.

c. List of Factors To Be Employed in the HHS Risk Adjustment Models (§ 153.320)

The 2025 benefit year HHS risk adjustment model factors resulting from the equally weighted (averaged) blended factors from separately solved models using the 2019, 2020, and 2021 enrollee-level EDGE data are shown in Tables 1 through 6. The adult, child, and infant models have been adjusted to account for the high-cost risk pool payment parameters by removing 60 percent of costs above the $1 million threshold.[48] Table 1 contains factors for each adult model, including the age-sex, HCCs, RXCs, RXC–HCC interactions, interacted HCC counts, and enrollment duration coefficients. Table 2 contains the factors for each child model, including the age-sex, HCCs, and interacted HCC counts coefficients. Table 3 lists the HCCs selected for the interacted HCC counts factors that would apply to the adult and child models. Table 4 contains the factors for each infant model. Tables 5 and 6 contain the HCCs included in the infant models' maturity and severity categories, respectively.

TABLE 1—ADULT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR

HCC or RXC No.	Factor	Platinum	Gold	Silver	Bronze	Catastrophic
	Demographic Factors					
.....	Age 21–24, Male	0.189	0.128	0.086	0.057	0.056
.....	Age 25–29, Male	0.197	0.133	0.088	0.056	0.055
.....	Age 30–34, Male	0.230	0.160	0.110	0.073	0.072
.....	Age 35–39, Male	0.249	0.174	0.119	0.077	0.076
.....	Age 40–44, Male	0.282	0.203	0.143	0.095	0.094
.....	Age 45–49, Male	0.312	0.228	0.164	0.112	0.111
.....	Age 50–54, Male	0.381	0.290	0.218	0.161	0.160
.....	Age 55–59, Male	0.428	0.330	0.254	0.191	0.189
.....	Age 60–64, Male	0.472	0.365	0.282	0.212	0.210
.....	Age 21–24, Female	0.285	0.196	0.127	0.078	0.076
.....	Age 25–29, Female	0.308	0.212	0.137	0.082	0.081
.....	Age 30–34, Female	0.370	0.268	0.188	0.126	0.125
.....	Age 35–39, Female	0.428	0.323	0.239	0.174	0.172
.....	Age 40–44, Female	0.482	0.372	0.284	0.211	0.209
.....	Age 45–49, Female	0.481	0.369	0.277	0.200	0.198
.....	Age 50–54, Female	0.519	0.404	0.307	0.226	0.224
.....	Age 55–59, Female	0.482	0.368	0.271	0.191	0.189
.....	Age 60–64, Female	0.475	0.358	0.261	0.179	0.176
HCC001	HIV/AIDS	0.342	0.265	0.234	0.197	0.196
HCC002	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock.	9.075	8.875	8.830	8.740	8.739
HCC003	Central Nervous System Infections, Except Viral Meningitis	8.379	8.276	8.229	8.151	8.149
HCC004	Viral or Unspecified Meningitis	8.328	8.217	8.161	8.071	8.068
HCC006	Opportunistic Infections	8.532	8.478	8.419	8.333	8.330
HCC008	Metastatic Cancer	23.002	22.629	22.616	22.506	22.506
HCC009	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia.	12.575	12.312	12.271	12.156	12.155
HCC010	Non-Hodgkin Lymphomas and Other Cancers and Tumors	5.705	5.535	5.473	5.362	5.360
HCC011	Colorectal, Breast (Age < 50), Kidney, and Other Cancers	3.651	3.476	3.405	3.283	3.280
HCC012	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors.	2.424	2.295	2.230	2.129	2.127
HCC013	Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors.	0.967	0.875	0.785	0.677	0.674
HCC018	Pancreas Transplant Status	6.320	6.253	6.239	6.228	6.219
HCC019	Diabetes with Acute Complications	0.259	0.214	0.172	0.130	0.128
HCC020	Diabetes with Chronic Complications	0.259	0.214	0.172	0.130	0.128
HCC021	Diabetes without Complication	0.259	0.214	0.172	0.130	0.128
HCC022	Type 1 Diabetes Mellitus, add-on to Diabetes HCCs 19–21	0.311	0.282	0.244	0.180	0.178
HCC023	Protein-Calorie Malnutrition	11.342	11.221	11.179	11.105	11.104
HCC026	Mucopolysaccharidosis	23.821	23.642	23.619	23.556	23.556
HCC027	Lipidoses and Glycogenosis	23.821	23.642	23.619	23.556	23.556
HCC029	Amyloidosis, Porphyria, and Other Metabolic Disorders	6.512	6.413	6.373	6.305	6.303

[48] We did not propose any changes to the high-cost risk pool parameters for the 2025 benefit year. Therefore, we are maintaining the $1 million attachment point and 60 percent coinsurance rate for the 2025 benefit year.

TABLE 1—ADULT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

HCC or RXC No.	Factor	Platinum	Gold	Silver	Bronze	Catastrophic
HCC030	Adrenal, Pituitary, and Other Significant Endocrine Disorders	1.314	1.237	1.184	1.108	1.104
HCC034	Liver Transplant Status/Complications	6.014	6.070	6.119	6.189	6.189
HCC035_1 [a]	Acute Liver Failure/Disease, Including Neonatal Hepatitis	7.464	7.288	7.254	7.181	7.184
HCC035_2	Chronic Liver Failure/End-Stage Liver Disorders	2.319	2.160	2.125	2.042	2.041
HCC036	Cirrhosis of Liver	0.613	0.534	0.490	0.417	0.416
HCC037_1	Chronic Viral Hepatitis C	0.514	0.454	0.403	0.348	0.347
HCC037_2	Chronic Hepatitis, Except Chronic Viral Hepatitis C	0.514	0.454	0.403	0.348	0.347
HCC041	Intestine Transplant Status/Complications	6.014	6.070	6.119	6.189	6.189
HCC042	Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis	11.053	10.907	10.903	10.857	10.857
HCC045	Intestinal Obstruction	5.038	4.837	4.783	4.669	4.668
HCC046	Chronic Pancreatitis	2.467	2.298	2.253	2.167	2.166
HCC047	Acute Pancreatitis	2.467	2.298	2.251	2.147	2.146
HCC048	Inflammatory Bowel Disease	1.108	1.023	0.944	0.820	0.816
HCC054	Necrotizing Fasciitis	8.617	8.468	8.446	8.388	8.388
HCC055	Bone/Joint/Muscle Infections/Necrosis	4.567	4.401	4.381	4.321	4.322
HCC056	Rheumatoid Arthritis and Specified Autoimmune Disorders	1.082	0.993	0.930	0.845	0.843
HCC057	Systemic Lupus Erythematosus and Other Autoimmune Disorders.	0.399	0.329	0.249	0.146	0.142
HCC061	Osteogenesis Imperfecta and Other Osteodystrophies	1.924	1.801	1.740	1.639	1.637
HCC062	Congenital/Developmental Skeletal and Connective Tissue Disorders.	1.924	1.801	1.740	1.639	1.637
HCC063	Cleft Lip/Cleft Palate	0.922	0.819	0.759	0.678	0.676
HCC066	Hemophilia	72.761	72.491	72.466	72.379	72.380
HCC067	Myelodysplastic Syndromes and Myelofibrosis	11.237	11.118	11.090	11.024	11.020
HCC068	Aplastic Anemia	11.237	11.118	11.090	11.024	11.020
HCC069	Acquired Hemolytic Anemia, Including Hemolytic Disease of Newborn.	11.237	11.118	11.090	11.024	11.020
HCC070 [b]	Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero	1.690	1.607	1.553	1.479	1.477
HCC071 [b]	Sickle-Cell Disorders, Except Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major.	1.690	1.607	1.553	1.479	1.477
HCC073	Combined and Other Severe Immunodeficiencies	4.065	3.975	3.947	3.887	3.885
HCC074	Disorders of the Immune Mechanism	4.065	3.975	3.947	3.887	3.885
HCC075	Coagulation Defects and Other Specified Hematological Disorders.	2.148	2.068	2.020	1.947	1.946
HCC081	Drug Use with Psychotic Complications	1.602	1.472	1.377	1.233	1.229
HCC082	Drug Use Disorder, Moderate/Severe, or Drug Use with Non-Psychotic Complications.	1.602	1.472	1.377	1.233	1.229
HCC083	Alcohol Use with Psychotic Complications	0.902	0.788	0.716	0.612	0.610
HCC084	Alcohol Use Disorder, Moderate/Severe, or Alcohol Use with Specified Non-Psychotic Complications.	0.902	0.788	0.716	0.612	0.610
HCC087_1	Schizophrenia	2.227	2.063	1.986	1.864	1.862
HCC087_2	Delusional and Other Specified Psychotic Disorders, Unspecified Psychosis.	2.190	2.030	1.951	1.820	1.818
HCC088	Major Depressive Disorder, Severe, and Bipolar Disorders	0.969	0.871	0.786	0.672	0.669
HCC090	Personality Disorders	0.663	0.586	0.492	0.379	0.376
HCC094	Anorexia/Bulimia Nervosa	2.000	1.894	1.827	1.722	1.719
HCC096	Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes.	8.590	8.557	8.527	8.484	8.481
HCC097	Down Syndrome, Fragile X, Other Chromosomal Anomalies, and Congenital Malformation Syndromes.	0.938	0.875	0.826	0.764	0.763
HCC102	Autistic Disorder	0.718	0.641	0.553	0.455	0.452
HCC103	Pervasive Developmental Disorders, Except Autistic Disorder	0.663	0.586	0.492	0.379	0.376
HCC106	Traumatic Complete Lesion Cervical Spinal Cord	9.112	8.957	8.905	8.806	8.805
HCC107	Quadriplegia	9.112	8.957	8.905	8.806	8.805
HCC108	Traumatic Complete Lesion Dorsal Spinal Cord	6.380	6.241	6.187	6.089	6.087
HCC109	Paraplegia	6.380	6.241	6.187	6.089	6.087
HCC110	Spinal Cord Disorders/Injuries	5.153	4.975	4.928	4.826	4.824
HCC111	Amyotrophic Lateral Sclerosis and Other Anterior Horn Cell Disease.	5.090	4.946	4.876	4.755	4.753
HCC112	Quadriplegic Cerebral Palsy	0.730	0.629	0.565	0.467	0.465
HCC113	Cerebral Palsy, Except Quadriplegic	0.424	0.355	0.299	0.219	0.217
HCC114	Spina Bifida and Other Brain/Spinal/Nervous System Congenital Anomalies.	1.205	1.120	1.063	0.972	0.969
HCC115	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy.	5.216	5.134	5.117	5.076	5.076
HCC117	Muscular Dystrophy	1.393	1.304	1.236	1.136	1.134
HCC118	Multiple Sclerosis	2.218	2.101	2.042	1.944	1.941
HCC119	Parkinson's, Huntington's, and Spinocerebellar Disease, and Other Neurodegenerative Disorders.	1.393	1.304	1.236	1.136	1.134
HCC120	Seizure Disorders and Convulsions	1.040	0.948	0.884	0.792	0.789
HCC121	Hydrocephalus	9.585	9.491	9.440	9.362	9.360
HCC122 [c]	Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage.	10.181	10.044	9.986	9.886	9.884
HCC123	Narcolepsy and Cataplexy	4.533	4.405	4.340	4.237	4.235
HCC125	Respirator Dependence/Tracheostomy Status	21.869	21.665	21.623	21.532	21.534
HCC126	Respiratory Arrest	8.558	8.341	8.300	8.210	8.209
HCC127	Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes.	8.558	8.341	8.300	8.210	8.209
HCC128	Heart Assistive Device/Artificial Heart	17.404	17.301	17.262	17.214	17.224
HCC129	Heart Transplant Status/Complications	17.404	17.301	17.262	17.214	17.224

TABLE 1—ADULT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

HCC or RXC No.	Factor	Platinum	Gold	Silver	Bronze	Catastrophic
HCC130	Heart Failure	1.896	1.809	1.773	1.707	1.705
HCC131	Acute Myocardial Infarction	4.955	4.737	4.720	4.652	4.653
HCC132	Unstable Angina and Other Acute Ischemic Heart Disease	3.690	3.489	3.452	3.355	3.355
HCC135	Heart Infection/Inflammation, Except Rheumatic	8.848	8.756	8.695	8.602	8.599
HCC137	Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders.	2.122	2.033	1.975	1.895	1.893
HCC138	Major Congenital Heart/Circulatory Disorders	2.122	2.033	1.975	1.895	1.893
HCC139	Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders.	2.122	2.033	1.975	1.895	1.893
HCC142	Specified Heart Arrhythmias	1.921	1.819	1.752	1.645	1.645
HCC145	Intracranial Hemorrhage	10.648	10.490	10.444	10.356	10.355
HCC146	Ischemic or Unspecified Stroke	1.428	1.314	1.282	1.212	1.212
HCC149	Cerebral Aneurysm and Arteriovenous Malformation	2.218	2.102	2.044	1.944	1.941
HCC150	Hemiplegia/Hemiparesis	3.309	3.190	3.178	3.134	3.134
HCC151	Monoplegia, Other Paralytic Syndromes	2.494	2.386	2.342	2.264	2.262
HCC153	Atherosclerosis of the Extremities with Ulceration or Gangrene	7.988	7.837	7.849	7.827	7.828
HCC154	Vascular Disease with Complications	5.128	4.989	4.949	4.869	4.868
HCC156	Pulmonary Embolism and Deep Vein Thrombosis	7.621	7.535	7.461	7.345	7.341
HCC158	Lung Transplant Status/Complications	11.099	10.994	10.963	10.924	10.930
HCC159	Cystic Fibrosis	4.156	4.021	3.969	3.883	3.881
HCC160	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis.	0.643	0.567	0.491	0.395	0.392
HCC161_1	Severe Asthma	0.643	0.567	0.491	0.395	0.392
HCC161_2	Asthma, Except Severe	0.643	0.567	0.491	0.395	0.392
HCC162	Fibrosis of Lung and Other Lung Disorders	1.615	1.529	1.476	1.391	1.388
HCC163	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections.	7.187	7.124	7.105	7.067	7.067
HCC174	Exudative Macular Degeneration	1.224	1.097	1.010	0.878	0.874
HCC183	Kidney Transplant Status/Complications	6.320	6.253	6.239	6.228	6.219
HCC184	End Stage Renal Disease	20.669	20.237	20.330	20.158	20.046
HCC187	Chronic Kidney Disease, Stage 5	0.773	0.689	0.685	0.645	0.633
HCC188	Chronic Kidney Disease, Severe (Stage 4)	0.773	0.689	0.685	0.645	0.633
HCC203	Ectopic and Molar Pregnancy	1.850	1.673	1.534	1.319	1.314
HCC204	Miscarriage with Complications	0.646	0.565	0.439	0.260	0.254
HCC205	Miscarriage with No or Minor Complications	0.646	0.565	0.439	0.260	0.254
HCC207	Pregnancy with Delivery with Major Complications	3.756	3.470	3.289	2.991	2.985
HCC208	Pregnancy with Delivery with Complications	3.756	3.470	3.289	2.991	2.985
HCC209	Pregnancy with Delivery with No or Minor Complications	2.769	2.554	2.335	1.972	1.962
HCC210	(Ongoing) Pregnancy without Delivery with Major Complications	0.815	0.714	0.561	0.370	0.363
HCC211	(Ongoing) Pregnancy without Delivery with Complications	0.530	0.454	0.318	0.170	0.166
HCC212	(Ongoing) Pregnancy without Delivery with No or Minor Complications.	0.018	0.005	0.000	0.000	0.000
HCC217	Chronic Ulcer of Skin, Except Pressure	1.557	1.464	1.433	1.375	1.374
HCC218	Extensive Third-Degree Burns	23.714	23.524	23.474	23.384	23.383
HCC219	Major Skin Burn or Condition	2.604	2.484	2.428	2.345	2.344
HCC223	Severe Head Injury	18.201	18.057	17.990	17.882	17.879
HCC226	Hip and Pelvic Fractures	8.018	7.783	7.765	7.688	7.688
HCC228	Vertebral Fractures without Spinal Cord Injury	4.277	4.116	4.047	3.925	3.922
HCC234	Traumatic Amputations and Amputation Complications	4.861	4.706	4.682	4.619	4.618
HCC251	Stem Cell, Including Bone Marrow, Transplant Status/Complications.	18.571	18.584	18.547	18.531	18.535
HCC253	Artificial Openings for Feeding or Elimination	5.697	5.584	5.563	5.511	5.511
HCC254	Amputation Status, Upper Limb or Lower Limb	0.936	0.835	0.799	0.738	0.736
Interacted HCC Counts Factors						
...	Severe illness, 1 payment HCC	-6.014	-6.070	-6.119	-6.189	-6.189
...	Severe illness, 2 payment HCCs	-5.733	-5.806	-5.833	-5.886	-5.886
...	Severe illness, 3 payment HCCs	-4.904	-4.952	-4.891	-4.846	-4.844
...	Severe illness, 4 payment HCCs	-4.190	-4.178	-4.033	-3.871	-3.865
...	Severe illness, 5 payment HCCs	-3.522	-3.432	-3.216	-2.954	-2.945
...	Severe illness, 6 payment HCCs	-3.024	-2.835	-2.557	-2.202	-2.192
...	Severe illness, 7 payment HCCs	-2.432	-2.116	-1.780	-1.330	-1.318
...	Severe illness, 8 payment HCCs	-2.179	-1.784	-1.416	-0.910	-0.896
...	Severe illness, 9 payment HCCs	-0.287	0.253	0.676	1.279	1.294
...	Severe illness, 10 or more payment HCCs	7.398	8.299	8.836	9.657	9.679
...	Transplant severe illness, 4 payment HCCs	3.792	3.704	3.651	3.531	3.516
...	Transplant severe illness, 5 payment HCCs	7.054	6.949	6.906	6.792	6.775
...	Transplant severe illness, 6 payment HCCs	12.584	12.463	12.431	12.324	12.304
...	Transplant severe illness, 7 payment HCCs	15.636	15.506	15.473	15.364	15.346
...	Transplant severe illness, 8 or more payment HCCs	31.955	31.916	31.908	31.845	31.825
Enrollment Duration Factors						
...	Enrolled for 1 month, at least one payment HCC	11.208	9.742	8.808	7.844	7.818
...	Enrolled for 2 months, at least one payment HCC	5.197	4.458	3.958	3.479	3.466
...	Enrolled for 3 months, at least one payment HCC	3.378	2.898	2.549	2.224	2.216
...	Enrolled for 4 months, at least one payment HCC	2.129	1.799	1.545	1.313	1.307
...	Enrolled for 5 months, at least one payment HCC	1.586	1.340	1.143	0.959	0.955
...	Enrolled for 6 months, at least one payment HCC	1.039	0.857	0.705	0.560	0.556

TABLE 1—ADULT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

HCC or RXC No.	Factor	Platinum	Gold	Silver	Bronze	Catastrophic
	Prescription Drug Factors					
RXC 01	Anti-HIV Agents	5.097	4.612	4.345	3.920	3.908
RXC 02	Anti-Hepatitis C (HCV) Agents, Direct Acting Agents	8.273	7.809	7.812	7.711	7.714
RXC 03[d]	Antiarrhythmics	0.080	0.072	0.064	0.051	0.036
RXC 04	Phosphate Binders	0.901	1.115	1.007	1.206	1.390
RXC 05	Inflammatory Bowel Disease Agents	1.324	1.227	1.105	0.941	0.936
RXC 06	Insulin	1.366	1.193	1.018	0.844	0.838
RXC 07	Anti-Diabetic Agents, Except Insulin and Metformin Only	0.800	0.702	0.582	0.409	0.403
RXC 08	Multiple Sclerosis Agents	15.175	14.409	14.206	13.774	13.767
RXC 09[e]	Immune Suppressants and Immunomodulators	12.005	11.495	11.478	11.335	11.337
RXC 10	Cystic Fibrosis Agents	17.441	17.041	17.022	16.903	16.902
RXC 01 x HCC001.	Additional effect for enrollees with RXC 01 and HCC 001	2.467	2.521	2.790	3.101	3.115
RXC 02 x HCC037_1, 036, 035_2, 035_1, 034.	Additional effect for enrollees with RXC 02 and (HCC 037_1 or 036 or 035_2 or 035_1 or 034).	-0.514	-0.454	-0.403	-0.348	-0.347
RXC 03 x HCC142.	Additional effect for enrollees with RXC 03 and HCC 142	0.000	0.000	0.000	0.000	0.000
RXC 04 x HCC184, 183, 187, 188.	Additional effect for enrollees with RXC 04 and (HCC 184 or 183 or 187 or 188).	0.000	0.000	0.000	0.000	0.000
RXC 05 x HCC048, 041.	Additional effect for enrollees with RXC 05 and (HCC 048 or 041).	-0.688	-0.631	-0.570	-0.471	-0.468
RXC 06 x HCC018, 019, 020, 021.	Additional effect for enrollees with RXC 06 and (HCC 018 or 019 or 020 or 021).	0.402	0.444	0.532	0.544	0.546
RXC 07 x HCC018, 019, 020, 021.	Additional effect for enrollees with RXC 07 and (HCC 018 or 019 or 020 or 021).	-0.258	-0.213	-0.172	-0.130	-0.128
RXC 08 x HCC118.	Additional effect for enrollees with RXC 08 and HCC 118	-0.132	0.227	0.497	0.902	0.914
RXC 09 x HCC056 or 057 and 048 or 041.	Additional effect for enrollees with RXC 09 and (HCC 048 or 041) and (HCC 056 or 057).	0.343	0.396	0.433	0.492	0.494
RXC 09 x HCC056.	Additional effect for enrollees with RXC 09 and HCC 056	-1.082	-0.993	-0.930	-0.845	-0.843
RXC 09 x HCC057.	Additional effect for enrollees with RXC 09 and HCC 057	-0.399	-0.329	-0.249	-0.146	-0.142
RXC 09 x HCC048, 041.	Additional effect for enrollees with RXC 09 and (HCC 048 or 041).	1.315	1.406	1.499	1.634	1.638
RXC 10 x HCC159, 158.	Additional effect for enrollees with RXC 10 and (HCC 159 or 158).	42.562	42.609	42.695	42.807	42.812

[a] HCC numbers that appear with an underscore in this document will appear without the underscore in the ''Do It Yourself (DIY)'' software. For example, HCC 35_1 in this table will appear as HCC 351 in the DIY software.

[b] For the 2025 benefit year HHS risk adjustment models, we made the following changes to improve the prediction of sickle cell disease costs: (1) updated mappings for sickle cell disease so that additional diagnosis codes are included in the model (within HCC 71); (2) ungrouped HCCs 70 and 71 in the adult and child models; and (3) reassigned HCC 70 and 71 to a higher severity in the infant models. To reflect these changes, we also relabeled HCC 70 and HCC 71. These updated mapping and HCC label changes parallel the reclassified Medicare Part C V28 CMS–HCCs. See, for example, the Advance Notice of Methodological Changes for Calendar Year (CY) 2024 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies (February 1, 2023). *https://www.cms.gov/files/document/2024-advance-notice-pdf.pdf.*

[c] Consistent with fiscal year 2024 updates to ICD–10 codes (effective October 1, 2023; see *https://www.cms.gov/medicare/coding-billing/icd-10-codes/2024-icd-10-cm*), we updated the label for HCC 122 from ''Coma, Brain Compression/Anoxic Damage'' to ''Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage.'' The specific ICD–10 code update that prompted this label change was the addition of code R402A ''Nontraumatic coma due to underlying condition'', which we have mapped to HCC 122. HCC 122 is only assigned to enrollees who do not also have a head injury code, because HCC 223 (Severe Head Injury) captures codes for head injury with loss of consciousness and supersedes HCC 122 in a hierarchy. As such, the scope of HCC 122 is better reflected by the updated label. Because this ICD–10 update is effective October 1, 2023, future releases of benefit year 2023 and benefit year 2024 DIY software will also reflect the updated label and diagnosis-to-HCC mapping.

[d] We constrain RXC 03 to be equal to average plan liability for RXC 03 drugs, RXC 04 to be equal to the average plan liability for RXC 04 drugs, and we constrain RXC 03 x HCC142 and RXC 04 x HCC184, 183, 187, 188 to be equal to 0. See March 2016 Risk Adjustment Methodology Discussion Paper (March 24, 2016), available at: *https://www.cms.gov/cciio/resources/forms-reports-and-other-resources/downloads/ra-march-31-white-paper-032416.pdf* (where we previously discussed the use of constraints in the HHS risk adjustment models).

[e] Similar to recalibration of the 2023 and 2024 benefit year HHS risk adjustment adult models and consistent with the policies adopted in the 2023 and 2024 Payment Notices, the 2025 benefit year factors in this rule reflect the removal of the mapping of hydroxychloroquine sulfate to RXC 09 (Immune Suppressants and Immunomodulators) and the related RXC 09 interactions (RXC 09 x HCC056 or 057 and 048 or 041; RXC 09 x HCC056; RXC 09 x HCC 057; RXC 09x HCC048, 041) from the 2019 benefit year enrollee-level EDGE data sets for purposes of recalibrating the 2025 benefit year adult models. See 87 FR 27232 through 27235. Additionally, the factors for the adult models reflect the use of the final, fourth quarter (Q4) RXC mapping document that was applicable for each benefit year of data included in the current year's model recalibration (except under extenuating circumstances that can result in targeted changes to RXC mappings). See 87 FR 27231 through 27232.

TABLE 2—CHILD HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR

Factor	Platinum	Gold	Silver	Bronze	Catastrophic
Demographic Factors					
Age 2–4, Male	0.270	0.191	0.141	0.105	0.104
Age 5–9, Male	0.204	0.135	0.096	0.071	0.071
Age 10–14, Male	0.224	0.156	0.115	0.090	0.089
Age 15–20, Male	0.260	0.187	0.137	0.102	0.101
Age 2–4, Female	0.223	0.153	0.113	0.089	0.088
Age 5–9, Female	0.149	0.086	0.053	0.034	0.034
Age 10–14, Female	0.222	0.153	0.113	0.089	0.088
Age 15–20, Female	0.300	0.212	0.145	0.097	0.095
Diagnosis Factors					
HIV/AIDS	4.355	3.942	3.856	3.659	3.657
Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	14.567	14.370	14.294	14.176	14.174
Central Nervous System Infections, Except Viral Meningitis	13.944	13.811	13.745	13.658	13.656
Viral or Unspecified Meningitis	12.972	12.833	12.741	12.617	12.614
Opportunistic Infections	18.957	18.895	18.813	18.719	18.716
Metastatic Cancer	30.530	30.304	30.243	30.137	30.136
Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia	8.962	8.738	8.640	8.486	8.484
Non-Hodgkin Lymphomas and Other Cancers and Tumors	7.708	7.523	7.421	7.266	7.263
Colorectal, Breast (Age <50), Kidney, and Other Cancers	4.194	4.057	3.972	3.844	3.841
Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors	4.194	4.057	3.972	3.844	3.841
Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors	1.265	1.155	1.058	0.937	0.933
Pancreas Transplant Status	11.660	11.580	11.544	11.505	11.503
Diabetes with Acute Complications	2.364	2.121	1.914	1.622	1.615
Diabetes with Chronic Complications	2.364	2.121	1.914	1.622	1.615
Diabetes without Complication	2.364	2.121	1.914	1.622	1.615
Protein-Calorie Malnutrition	19.614	19.505	19.457	19.397	19.396
Mucopolysaccharidosis	34.440	34.213	34.169	34.070	34.070
Lipidoses and Glycogenosis	34.440	34.213	34.169	34.070	34.070
Congenital Metabolic Disorders, Not Elsewhere Classified	4.690	4.583	4.523	4.442	4.439
Amyloidosis, Porphyria, and Other Metabolic Disorders	4.690	4.583	4.523	4.442	4.439
Adrenal, Pituitary, and Other Significant Endocrine Disorders	5.289	5.072	5.007	4.902	4.901
Liver Transplant Status/Complications	11.660	11.580	11.544	11.505	11.503
Acute Liver Failure/Disease, Including Neonatal Hepatitis	7.742	7.607	7.570	7.488	7.487
Chronic Liver Failure/End-Stage Liver Disorders	7.742	7.607	7.570	7.488	7.487
Cirrhosis of Liver	3.999	3.881	3.835	3.764	3.763
Chronic Viral Hepatitis C	1.257	1.152	1.093	1.027	1.025
Chronic Hepatitis, Except Chronic Viral Hepatitis C	0.294	0.249	0.198	0.140	0.138
Intestine Transplant Status/Complications	13.387	13.303	13.228	13.137	13.135
Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis	19.019	18.756	18.703	18.597	18.597
Intestinal Obstruction	4.601	4.431	4.343	4.208	4.205
Chronic Pancreatitis	10.235	10.115	10.085	10.007	10.007
Acute Pancreatitis	4.988	4.771	4.687	4.541	4.538
Inflammatory Bowel Disease	9.947	9.582	9.498	9.313	9.311
Necrotizing Fasciitis	4.144	3.957	3.872	3.746	3.745
Bone/Joint/Muscle Infections/Necrosis	4.144	3.957	3.872	3.746	3.745
Rheumatoid Arthritis and Specified Autoimmune Disorders	4.632	4.397	4.315	4.181	4.179
Systemic Lupus Erythematosus and Other Autoimmune Disorders	0.878	0.777	0.679	0.559	0.555
Osteogenesis Imperfecta and Other Osteodystrophies	1.241	1.140	1.069	0.981	0.979
Congenital/Developmental Skeletal and Connective Tissue Disorders	1.241	1.140	1.069	0.981	0.979
Cleft Lip/Cleft Palate	0.972	0.841	0.742	0.616	0.613
Hemophilia	64.093	63.672	63.604	63.429	63.427
Myelodysplastic Syndromes and Myelofibrosis	12.305	12.163	12.117	12.039	12.038
Aplastic Anemia	12.305	12.163	12.117	12.039	12.038
Acquired Hemolytic Anemia, Including Hemolytic Disease of Newborn	12.305	12.163	12.117	12.039	12.038
Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero[a]	3.564	3.400	3.303	3.173	3.170
Sickle-Cell Disorders, Except Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major[a]	3.369	3.233	3.160	3.055	3.053
Combined and Other Severe Immunodeficiencies	5.105	4.975	4.918	4.826	4.824
Disorders of the Immune Mechanism	5.105	4.975	4.918	4.826	4.824
Coagulation Defects and Other Specified Hematological Disorders	4.043	3.938	3.869	3.779	3.777
Drug Use with Psychotic Complications	2.350	2.204	2.111	1.972	1.969
Drug Use Disorder, Moderate/Severe, or Drug Use with Non-Psychotic Complications	2.350	2.204	2.111	1.972	1.969
Alcohol Use with Psychotic Complications	0.899	0.765	0.658	0.502	0.499
Alcohol Use Disorder, Moderate/Severe, or Alcohol Use with Specified Non-Psychotic Complications	0.899	0.765	0.658	0.502	0.499
Schizophrenia	3.545	3.304	3.188	3.007	3.004
Delusional and Other Specified Psychotic Disorders, Unspecified Psychosis	3.289	3.067	2.940	2.745	2.741
Major Depressive Disorder, Severe, and Bipolar Disorders	2.506	2.319	2.191	2.017	2.013
Personality Disorders	0.348	0.263	0.159	0.043	0.040
Anorexia/Bulimia Nervosa	2.207	2.070	1.977	1.846	1.843
Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes	12.082	12.007	11.947	11.870	11.868
Down Syndrome, Fragile X, Other Chromosomal Anomalies, and Congenital Malformation Syndromes	0.867	0.758	0.686	0.583	0.581
Autistic Disorder	2.506	2.319	2.191	2.017	2.013

TABLE 2—CHILD HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

Factor	Platinum	Gold	Silver	Bronze	Catastrophic
Pervasive Developmental Disorders, Except Autistic Disorder	0.374	0.303	0.222	0.140	0.139
Traumatic Complete Lesion Cervical Spinal Cord	10.147	9.959	9.908	9.810	9.809
Quadriplegia	10.147	9.959	9.908	9.810	9.809
Traumatic Complete Lesion Dorsal Spinal Cord	9.868	9.664	9.615	9.515	9.514
Paraplegia	9.868	9.664	9.615	9.515	9.514
Spinal Cord Disorders/Injuries	4.750	4.568	4.457	4.285	4.280
Amyotrophic Lateral Sclerosis and Other Anterior Horn Cell Disease	49.556	49.316	49.259	49.139	49.137
Quadriplegic Cerebral Palsy	0.638	0.454	0.383	0.266	0.265
Cerebral Palsy, Except Quadriplegic	0.254	0.134	0.073	0.029	0.028
Spina Bifida and Other Brain/Spinal/Nervous System Congenital Anomalies	1.624	1.514	1.448	1.345	1.342
Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy	10.278	10.133	10.111	10.053	10.053
Muscular Dystrophy	5.546	5.399	5.326	5.206	5.203
Multiple Sclerosis	9.135	8.789	8.736	8.602	8.604
Parkinson's, Huntington's, and Spinocerebellar Disease, and Other Neurodegenerative Disorders	5.546	5.399	5.326	5.206	5.203
Seizure Disorders and Convulsions	1.556	1.429	1.316	1.169	1.165
Hydrocephalus	11.666	11.630	11.604	11.580	11.579
Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage [b]	11.216	11.250	11.261	11.287	11.287
Narcolepsy and Cataplexy	4.058	3.911	3.807	3.664	3.659
Respirator Dependence/Tracheostomy Status	24.720	24.506	24.442	24.337	24.336
Respiratory Arrest	15.720	15.472	15.398	15.267	15.266
Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes	15.720	15.472	15.398	15.267	15.266
Heart Assistive Device/Artificial Heart	13.387	13.303	13.228	13.137	13.135
Heart Transplant Status/Complications	13.387	13.303	13.228	13.137	13.135
Heart Failure	4.067	3.968	3.914	3.830	3.828
Acute Myocardial Infarction	1.060	1.025	1.005	0.979	0.979
Unstable Angina and Other Acute Ischemic Heart Disease	1.060	1.025	1.005	0.979	0.979
Heart Infection/Inflammation, Except Rheumatic	17.077	16.964	16.888	16.786	16.783
Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders	3.938	3.796	3.682	3.540	3.536
Major Congenital Heart/Circulatory Disorders	0.986	0.896	0.790	0.685	0.682
Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders	0.590	0.506	0.425	0.347	0.345
Specified Heart Arrhythmias	3.118	2.980	2.899	2.785	2.783
Intracranial Hemorrhage	12.686	12.611	12.565	12.497	12.495
Ischemic or Unspecified Stroke	1.470	1.362	1.304	1.210	1.208
Cerebral Aneurysm and Arteriovenous Malformation	1.049	0.952	0.899	0.807	0.804
Hemiplegia/Hemiparesis	5.471	5.353	5.295	5.207	5.205
Monoplegia, Other Paralytic Syndromes	1.374	1.253	1.183	1.072	1.070
Atherosclerosis of the Extremities with Ulceration or Gangrene	11.860	11.625	11.557	11.424	11.422
Vascular Disease with Complications	8.127	7.988	7.947	7.872	7.871
Pulmonary Embolism and Deep Vein Thrombosis	19.738	19.604	19.533	19.426	19.425
Lung Transplant Status/Complications	13.387	13.303	13.228	13.137	13.135
Cystic Fibrosis	48.718	48.241	48.201	48.054	48.055
Chronic Obstructive Pulmonary Disease, Including Bronchiectasis	1.658	1.507	1.403	1.267	1.264
Severe Asthma	1.323	1.171	1.045	0.889	0.885
Asthma, Except Severe	0.320	0.250	0.170	0.102	0.100
Fibrosis of Lung and Other Lung Disorders	1.490	1.361	1.249	1.115	1.111
Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections	11.216	11.250	11.261	11.287	11.287
Kidney Transplant Status/Complications	11.660	11.580	11.544	11.505	11.503
End Stage Renal Disease	29.641	29.391	29.371	29.278	29.278
Chronic Kidney Disease, Stage 5	0.787	0.749	0.722	0.685	0.683
Chronic Kidney Disease, Severe (Stage 4)	0.787	0.749	0.722	0.685	0.683
Ectopic and Molar Pregnancy	0.864	0.731	0.565	0.411	0.406
Miscarriage with Complications	0.474	0.369	0.227	0.089	0.086
Miscarriage with No or Minor Complications	0.474	0.369	0.227	0.089	0.086
Pregnancy with Delivery with Major Complications	3.166	2.876	2.634	2.231	2.219
Pregnancy with Delivery with Complications	3.166	2.876	2.634	2.231	2.219
Pregnancy with Delivery with No or Minor Complications	2.399	2.179	1.914	1.475	1.460
(Ongoing) Pregnancy without Delivery with Major Complications	0.420	0.308	0.152	0.039	0.036
(Ongoing) Pregnancy without Delivery with Complications	0.420	0.308	0.152	0.039	0.036
(Ongoing) Pregnancy without Delivery with No or Minor Complications	0.276	0.187	0.079	0.037	0.036
Chronic Ulcer of Skin, Except Pressure	1.877	1.782	1.712	1.634	1.632
Extensive Third-Degree Burns	22.876	22.657	22.576	22.440	22.437
Major Skin Burn or Condition	2.441	2.286	2.187	2.056	2.053
Severe Head Injury	22.876	22.657	22.576	22.440	22.437
Hip and Pelvic Fractures	4.636	4.428	4.327	4.191	4.188
Vertebral Fractures without Spinal Cord Injury	4.483	4.293	4.176	3.999	3.994
Traumatic Amputations and Amputation Complications	3.818	3.627	3.528	3.362	3.357
Stem Cell, Including Bone Marrow, Transplant Status/Complications	13.387	13.303	13.228	13.137	13.135
Artificial Openings for Feeding or Elimination	5.711	5.551	5.525	5.451	5.450
Amputation Status, Upper Limb or Lower Limb	3.818	3.627	3.528	3.362	3.357
Interacted HCC Counts Factors					
Severe illness, 1 payment HCC	−11.216	−11.250	−11.261	−11.287	−11.287
Severe illness, 2 payment HCCs	−11.137	−11.200	−11.218	−11.265	−11.266

TABLE 2—CHILD HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

Factor	Platinum	Gold	Silver	Bronze	Catastrophic
Severe illness, 3 payment HCCs	−9.692	−9.760	−9.689	−9.658	−9.655
Severe illness, 4 payment HCCs	−8.984	−8.987	−8.809	−8.652	−8.645
Severe illness, 5 payment HCCs	−6.593	−6.543	−6.303	−6.068	−6.059
Severe illness, 6 or 7 payment HCCs	−2.061	−1.828	−1.468	−1.064	−1.051
Severe illness, 8 or more payment HCCs	17.868	18.550	19.132	19.858	19.877
Transplant severe illness, 4 or more payment HCCs	14.488	14.558	14.580	14.612	14.613

[a] For the 2025 benefit year HHS risk adjustment models, we made the following changes to improve the prediction of sickle cell disease costs: (1) updated mappings for sickle cell disease so that additional diagnosis codes are included in the model (within HCC 71); (2) ungrouped HCCs 70 and 71 in the adult and child models; and (3) reassigned HCC 70 and 71 to a higher severity in the infant models. To reflect these changes, we also relabeled HCC 70 and HCC 71. These updated mapping and HCC label changes parallel the reclassified Medicare Part C V28 CMS–HCCs. See, for example, the Advance Notice of Methodological Changes for Calendar Year (CY) 2024 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies (February 1, 2023). *https://www.cms.gov/files/document/2024-advance-notice-pdf.pdf.*

[b] Consistent with fiscal year 2024 updates to ICD–10 codes (effective October 1, 2023; see *https://www.cms.gov/medicare/coding-billing/icd-10-codes/2024-icd-10-cm*), we updated the label for HCC 122 from ''Coma, Brain Compression/Anoxic Damage'' to ''Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage.'' The specific ICD–10 code update that prompted this label change was the addition of code R402A ''Nontraumatic coma due to underlying condition'', which we have mapped to HCC 122. HCC 122 is only assigned to enrollees who do not also have a head injury code, because HCC 223 (Severe Head Injury) captures codes for head injury with loss of consciousness and supersedes HCC 122 in a hierarchy. As such, the scope of HCC 122 is better reflected by the updated label. Because this ICD–10 update is effective October 1, 2023, future releases of the benefit year 2023 and benefit year 2024 DIY software will also reflect the updated label and diagnosis-to-HCC mapping.

TABLE 3—HCCS SELECTED FOR THE HCC INTERACTED COUNTS VARIABLES FOR THE ADULT AND CHILD MODELS FOR THE 2025 BENEFIT YEAR

Payment HCC	Severity illness indicator	Transplant indicator
HCC 2 Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock	X	
HCC 3 Central Nervous System Infections, Except Viral Meningitis	X	
HCC 4 Viral or Unspecified Meningitis	X	
HCC 6 Opportunistic Infections	X	
HCC 23 Protein-Calorie Malnutrition	X	
HCC 34 Liver Transplant Status/Complications	X	X
HCC 41 Intestine Transplant Status/Complications	X	X
HCC 42 Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis	X	
HCC 96 Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes	X	
HCC 121 Hydrocephalus	X	
HCC 122 Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage	X	
HCC 125 Respirator Dependence/Tracheostomy Status	X	
HCC 135 Heart Infection/Inflammation, Except Rheumatic	X	
HCC 145 Intracranial Hemorrhage	X	
HCC 156 Pulmonary Embolism and Deep Vein Thrombosis	X	
HCC 158 Lung Transplant Status/Complications	X	X
HCC 163 Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections	X	
HCC 218 Extensive Third-Degree Burns	X	
HCC 223 Severe Head Injury	X	
HCC 251 Stem Cell, Including Bone Marrow, Transplant Status/Complications	X	X
G13 (Includes HCC 126 Respiratory Arrest and HCC 127 Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes)	X	
G14 (Includes HCC 128 Heart Assistive Device/Artificial Heart and HCC 129 Heart Transplant Status/Complications)	X	X
G24 (Includes HCC 18 Pancreas Transplant Status and HCC 183 Kidney Transplant Status/Complications)	X	X

TABLE 4—INFANT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR

Group	Platinum	Gold	Silver	Bronze	Catastrophic
Extremely Immature * Severity Level 5 (Highest)	204.040	202.652	202.406	201.915	201.913
Extremely Immature * Severity Level 4	149.999	148.437	148.051	147.377	147.372
Extremely Immature * Severity Level 3	32.887	31.619	31.251	30.693	30.687
Extremely Immature * Severity Level 2	32.887	31.619	31.251	30.693	30.687
Extremely Immature * Severity Level 1 (Lowest)	32.887	31.619	31.251	30.693	30.687
Immature * Severity Level 5 (Highest)	121.913	120.553	120.309	119.828	119.827
Immature * Severity Level 4	71.026	69.564	69.264	68.692	68.689
Immature * Severity Level 3	32.887	31.619	31.251	30.693	30.687
Immature * Severity Level 2	30.558	29.332	28.960	28.403	28.398
Immature * Severity Level 1 (Lowest)	25.110	23.887	23.485	22.871	22.863
Premature/Multiples * Severity Level 5 (Highest)	108.585	107.335	107.096	106.631	106.628
Premature/Multiples * Severity Level 4	29.666	28.404	28.060	27.490	27.486
Premature/Multiples * Severity Level 3	13.527	12.617	12.148	11.482	11.467
Premature/Multiples * Severity Level 2	8.071	7.368	6.849	6.149	6.131
Premature/Multiples * Severity Level 1 (Lowest)	5.765	5.167	4.644	4.023	4.005
Term * Severity Level 5 (Highest)	81.884	80.752	80.438	79.915	79.909
Term * Severity Level 4	16.190	15.254	14.803	14.170	14.158
Term * Severity Level 3	5.770	5.207	4.688	4.061	4.041
Term * Severity Level 2	3.712	3.231	2.707	2.109	2.092
Term * Severity Level 1 (Lowest)	1.968	1.597	1.135	0.784	0.776
Age 1 * Severity Level 5 (Highest)	69.391	68.741	68.568	68.287	68.284
Age 1 * Severity Level 4	12.653	12.170	11.942	11.641	11.635
Age 1 * Severity Level 3	2.829	2.569	2.374	2.179	2.174
Age 1 * Severity Level 2	1.855	1.628	1.423	1.216	1.210

TABLE 4—INFANT HHS RISK ADJUSTMENT MODEL FACTORS FOR THE 2025 BENEFIT YEAR—Continued

Group	Platinum	Gold	Silver	Bronze	Catastrophic
Age 1 * Severity Level 1 (Lowest)	0.581	0.487	0.431	0.394	0.393
Age 0 Male	0.604	0.566	0.539	0.475	0.473
Age 1 Male	0.090	0.076	0.060	0.042	0.041

TABLE 5—HHS HCCS INCLUDED IN INFANT MODEL MATURITY CATEGORIES

Maturity category	HCC/description
Extremely Immature	Extremely Immature Newborns, Birth weight <500 Grams.
Extremely Immature	Extremely Immature Newborns, Including Birth weight 500–749 Grams.
Extremely Immature	Extremely Immature Newborns, Including Birth weight 750–999 Grams.
Immature	Premature Newborns, Including Birth weight 1000–1499 Grams.
Immature	Premature Newborns, Including Birth weight 1500–1999 Grams.
Premature/Multiples	Premature Newborns, Including Birth weight 2000–2499 Grams.
Premature/Multiples	Other Premature, Low Birth weight, Malnourished, or Multiple Birth Newborns.
Term	Term or Post-Term Singleton Newborn, Normal or High Birth weight.
Age 1	All age 1 infants.

TABLE 6—HHS HCCS INCLUDED IN INFANT MODEL SEVERITY CATEGORIES

Severity category	HCC/description
Severity Level 5 (Highest)	Metastatic Cancer.
Severity Level 5	Pancreas Transplant Status.
Severity Level 5	Liver Transplant Status/Complications.
Severity Level 5	Intestine Transplant Status/Complications.
Severity Level 5	Peritonitis/Gastrointestinal Perforation/Necrotizing Enterocolitis.
Severity Level 5	Respirator Dependence/Tracheostomy Status.
Severity Level 5	Heart Assistive Device/Artificial Heart.
Severity Level 5	Heart Transplant Status/Complications.
Severity Level 5	Heart Failure.
Severity Level 5	Hypoplastic Left Heart Syndrome and Other Severe Congenital Heart Disorders.
Severity Level 5	Lung Transplant Status/Complications.
Severity Level 5	Kidney Transplant Status/Complications.
Severity Level 5	End Stage Renal Disease.
Severity Level 5	Stem Cell, Including Bone Marrow, Transplant Status/Complications.
Severity Level 4	Septicemia, Sepsis, Systemic Inflammatory Response Syndrome/Shock.
Severity Level 4	Lung, Brain, and Other Severe Cancers, Including Pediatric Acute Lymphoid Leukemia.
Severity Level 4	Mucopolysaccharidosis.
Severity Level 4	Adrenal, Pituitary, and Other Significant Endocrine Disorders.
Severity Level 4	Acute Liver Failure/Disease, Including Neonatal Hepatitis.
Severity Level 4	Chronic Liver Failure/End-Stage Liver Disorders.
Severity Level 4	Major Congenital Anomalies of Diaphragm, Abdominal Wall, and Esophagus, Age <2.
Severity Level 4	Myelodysplastic Syndromes and Myelofibrosis.
Severity Level 4	Aplastic Anemia.
Severity Level 4	Combined and Other Severe Immunodeficiencies.
Severity Level 4	Traumatic Complete Lesion Cervical Spinal Cord.
Severity Level 4	Quadriplegia.
Severity Level 4	Amyotrophic Lateral Sclerosis and Other Anterior Horn Cell Disease.
Severity Level 4	Quadriplegic Cerebral Palsy.
Severity Level 4	Myasthenia Gravis/Myoneural Disorders and Guillain-Barre Syndrome/Inflammatory and Toxic Neuropathy.
Severity Level 4	Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage.[a]
Severity Level 4	Respiratory Arrest.
Severity Level 4	Cardio-Respiratory Failure and Shock, Including Respiratory Distress Syndromes.
Severity Level 4	Acute Myocardial Infarction.
Severity Level 4	Heart Infection/Inflammation, Except Rheumatic.
Severity Level 4	Major Congenital Heart/Circulatory Disorders.
Severity Level 4	Intracranial Hemorrhage.
Severity Level 4	Ischemic or Unspecified Stroke.
Severity Level 4	Vascular Disease with Complications.
Severity Level 4	Pulmonary Embolism and Deep Vein Thrombosis.
Severity Level 4	Aspiration and Specified Bacterial Pneumonias and Other Severe Lung Infections.
Severity Level 4	Chronic Kidney Disease, Stage 5.
Severity Level 4	Artificial Openings for Feeding or Elimination.
Severity Level 3	HIV/AIDS.
Severity Level 3	Central Nervous System Infections, Except Viral Meningitis.
Severity Level 3	Opportunistic Infections.
Severity Level 3	Non-Hodgkin Lymphomas and Other Cancers and Tumors.
Severity Level 3	Colorectal, Breast (Age <50), Kidney and Other Cancers.
Severity Level 3	Breast (Age 50+) and Prostate Cancer, Benign/Uncertain Brain Tumors, and Other Cancers and Tumors.

TABLE 6—HHS HCCS INCLUDED IN INFANT MODEL SEVERITY CATEGORIES—Continued

Severity category	HCC/description
Severity Level 3	Lipidoses and Glycogenosis.
Severity Level 3	Intestinal Obstruction.
Severity Level 3	Necrotizing Fasciitis.
Severity Level 3	Bone/Joint/Muscle Infections/Necrosis.
Severity Level 3	Osteogenesis Imperfecta and Other Osteodystrophies.
Severity Level 3	Cleft Lip/Cleft Palate.
Severity Level 3	Hemophilia.
Severity Level 3	Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero.[b]
Severity Level 3	Disorders of the Immune Mechanism.
Severity Level 3	Coagulation Defects and Other Specified Hematological Disorders.
Severity Level 3	Drug Use with Psychotic Complications.
Severity Level 3	Drug Use Disorder, Moderate/Severe, or Drug Use with Non-Psychotic Complications.
Severity Level 3	Alcohol Use with Psychotic Complications.
Severity Level 3	Alcohol Use Disorder, Moderate/Severe, or Alcohol Use with Specified Non-Psychotic Complications.
Severity Level 3	Prader-Willi, Patau, Edwards, and Autosomal Deletion Syndromes.
Severity Level 3	Traumatic Complete Lesion Dorsal Spinal Cord.
Severity Level 3	Paraplegia.
Severity Level 3	Spinal Cord Disorders/Injuries.
Severity Level 3	Cerebral Palsy, Except Quadriplegic.
Severity Level 3	Spina Bifida and Other Brain/Spinal/Nervous System Congenital Anomalies.
Severity Level 3	Muscular Dystrophy.
Severity Level 3	Parkinson's, Huntington's, and Spinocerebellar Disease, and Other Neurodegenerative Disorders.
Severity Level 3	Hydrocephalus.
Severity Level 3	Unstable Angina and Other Acute Ischemic Heart Disease.
Severity Level 3	Atrial and Ventricular Septal Defects, Patent Ductus Arteriosus, and Other Congenital Heart/Circulatory Disorders.
Severity Level 3	Specified Heart Arrhythmias.
Severity Level 3	Cerebral Aneurysm and Arteriovenous Malformation.
Severity Level 3	Hemiplegia/Hemiparesis.
Severity Level 3	Cystic Fibrosis.
Severity Level 3	Extensive Third-Degree Burns.
Severity Level 3	Severe Head Injury.
Severity Level 3	Hip and Pelvic Fractures.
Severity Level 3	Vertebral Fractures without Spinal Cord Injury.
Severity Level 2	Viral or Unspecified Meningitis.
Severity Level 2	Thyroid Cancer, Melanoma, Neurofibromatosis, and Other Cancers and Tumors.
Severity Level 2	Diabetes with Acute Complications.
Severity Level 2	Diabetes with Chronic Complications.
Severity Level 2	Diabetes without Complication.
Severity Level 2	Protein-Calorie Malnutrition.
Severity Level 2	Congenital Metabolic Disorders, Not Elsewhere Classified.
Severity Level 2	Amyloidosis, Porphyria, and Other Metabolic Disorders.
Severity Level 2	Cirrhosis of Liver.
Severity Level 2	Chronic Pancreatitis.
Severity Level 2	Acute Pancreatitis.
Severity Level 2	Inflammatory Bowel Disease.
Severity Level 2	Rheumatoid Arthritis and Specified Autoimmune Disorders.
Severity Level 2	Systemic Lupus Erythematosus and Other Autoimmune Disorders.
Severity Level 2	Congenital/Developmental Skeletal and Connective Tissue Disorders.
Severity Level 2	Acquired Hemolytic Anemia, Including Hemolytic Disease of Newborn.
Severity Level 2	Sickle-Cell Disorders, Except Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major.[b]
Severity Level 2	Down Syndrome, Fragile X, Other Chromosomal Anomalies, and Congenital Malformation Syndromes.
Severity Level 2	Seizure Disorders and Convulsions.
Severity Level 2	Monoplegia, Other Paralytic Syndromes.
Severity Level 2	Atherosclerosis of the Extremities with Ulceration or Gangrene.
Severity Level 2	Chronic Obstructive Pulmonary Disease, Including Bronchiectasis.
Severity Level 2	Severe Asthma.
Severity Level 2	Fibrosis of Lung and Other Lung Disorders.
Severity Level 2	Chronic Kidney Disease, Severe (Stage 4).
Severity Level 2	Chronic Ulcer of Skin, Except Pressure.
Severity Level 2	Major Skin Burn or Condition.
Severity Level 1 (Lowest)	Chronic Viral Hepatitis C.
Severity Level 1	Chronic Hepatitis, Except Chronic Viral Hepatitis C.
Severity Level 1	Autistic Disorder.
Severity Level 1	Pervasive Developmental Disorders, Except Autistic Disorder.
Severity Level 1	Multiple Sclerosis.
Severity Level 1	Asthma, Except Severe.
Severity Level 1	Traumatic Amputations and Amputation Complications.

TABLE 6—HHS HCCs INCLUDED IN INFANT MODEL SEVERITY CATEGORIES—Continued

Severity category	HCC/description
Severity Level 1	Amputation Status, Upper Limb or Lower Limb.

[a] Consistent with fiscal year 2024 updates to ICD–10 codes (effective October 1, 2023; see *https://www.cms.gov/medicare/coding-billing/icd-10-codes/2024-icd-10-cm*), we updated the label for HCC 122 from ''Coma, Brain Compression/Anoxic Damage'' to ''Nontraumatic Coma, Except Diabetic, Hepatic, or Hypoglycemic; Nontraumatic Brain Compression/Anoxic Damage.'' The specific ICD–10 code update that prompted this label change was the addition of code R402A ''Nontraumatic coma due to underlying condition'', which we have mapped to HCC 122. HCC 122 is only assigned to enrollees who do not also have a head injury code, because HCC 223 (Severe Head Injury) captures codes for head injury with loss of consciousness and supersedes HCC 122 in a hierarchy. As such, the scope of HCC 122 is better reflected by the updated label. Because this ICD–10 update is effective October 1, 2023, future releases of the benefit year 2023 and benefit year 2024 DIY software will also reflect the updated label and diagnosis-to-HCC mapping.

[b] For the 2025 benefit year HHS risk adjustment models, we made the following changes to improve the prediction of sickle cell disease costs: (1) updated mappings for sickle cell disease so that additional diagnosis codes are included in the model (within HCC 71); (2) ungrouped HCCs 70 and 71 in the adult and child models; and (3) reassigned HCC 70 and 71 to a higher severity in the infant models. To reflect these changes, we also relabeled HCC 70 and HCC 71. These updated mapping and HCC label changes parallel the reclassified Medicare Part C V28 CMS–HCCs. See, for example, the Advance Notice of Methodological Changes for Calendar Year (CY) 2024 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies (February 1, 2023). *https://www.cms.gov/files/document/2024-advance-notice-pdf.pdf.*

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the 2025 benefit year risk adjustment model factors as proposed. We summarize and respond to public comments received on the proposed 2025 benefit year risk adjustment model factors below.

Comment: Many commenters were concerned about the treatment of high-cost prescription drugs, such as gene therapy drugs, in the risk adjustment model factors. One commenter was specifically concerned about the changes to the classification of Sickle Cell Disorders and the HCC mapping changes that align with the CMS–HCC model used for Medicare Advantage. This commenter recommended adding a new RXC for gene therapy for sickle-cell anemia and Beta Thalassemia in the adult models, stating that a gene therapy RXC would be a more reliable indicator of the presence of sickle cell disease or its severity. For similar reasons, this commenter also recommended continuing to group HCCs 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) in both the adult and child models. The commenter further recommended that we avoid relying on coding specificity where the diagnostic severity relies on measures of pain, which is why they state a gene therapy RXC would be more reliable. The commenter also stated any changes to HCC 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and HCC 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) should anticipate the impact of gene therapy treatments for sickle cell disease by having enrollees with a condition treatable by the same therapy grouped together.

Another commenter recommended the creation of a new, separate RXC for pre-exposure prophylaxis (PrEP) and one commenter recommended mapping Tepezza (a new treatment for thyroid eye disease) to an RXC in the risk adjustment models due to its high costs. Several commenters also expressed concern about the decline in RXC 01 (Anti-HIV Agents) and RXC 01 x HCC001 (Additional Effects for enrollees with RXC 01 and HCC 01) coefficients since the 2023 benefit year HHS risk adjustment adult models were adopted in the 2023 Payment Notice. Another commenter suggested creating a new, separate high-cost reimbursement pool for ultra-high-cost drugs, including mostly cell and gene therapy drugs.

Response: We did not propose to change the treatment of high-cost drugs, such as gene therapy drugs, in the 2025 benefit year risk adjustment models in the proposed rule and are not finalizing such updates in this rule. As we discussed in the 2022 Payment Notice (86 FR 24163), we recognize that the data used to recalibrate the risk adjustment models lag by several benefit years behind the applicable benefit year for risk adjustment and therefore do not account for the costs of new, expensive drugs, such as gene therapy drugs, that are expected to be available in the market by the applicable benefit year of risk adjustment. Thus, we have continued to consider ways that we could better account for high-cost drugs in the risk adjustment models and, as part of this effort, analyze new data as they become available. For example, when we were analyzing the changes to the sickle cell disorder related HCCs in the 2025 benefit year risk adjustment models, we considered whether to add a RXC for existing high-cost sickle cell drugs and new gene therapy treatments, but we found that we need to continue to analyze the evolution and availability of drug treatments for sickle cell disease. Specifically, the new gene therapy drugs for sickle cell disease were not approved for the market when we were developing the proposed 2025 benefit year risk adjustment models and coefficients.[49] Therefore, there were no data available on the use of the new gene therapy drugs for sickle cell disease when we were developing the 2025 benefit year proposals and with this final rule, there currently continues to be a general lack of data on the use of gene therapy drugs for sickle cell disease in the individual, small group, and merged markets. We are committed to continuing to analyze new data as they become available and, consistent with § 153.320(b)(1), we would propose the addition of any new RXCs to the risk adjustment models through notice and comment rulemaking. We also note that if an enrollee in an issuer's risk adjustment covered plan has claims for gene therapy, other high-cost drugs, or other expensive treatments, that enrollee would be eligible for the high-cost risk pool payments if claims for that enrollee are over $1 million.[50]

Considering the absence of adequate data at the time of development of the proposed 2025 benefit year risk adjustment models and coefficients for inclusion in the 2025 Payment Notice proposed rule, we did not propose and

[49] We published the proposed 2025 benefit year coefficients in the 2025 Payment Notice proposed rule in November 2023. The first gene therapy treatment for sickle cell disease were not approved for use until December 2023. *See https://www.fda.gov/news-events/press-announcements/fda-approves-first-gene-therapies-treat-patients-sickle-cell-disease.*

[50] For example, the new sickle cell gene therapy treatments are expected to exceed the high-cost risk pool payment threshold. See, DeMartino P, Haag MB, Hersh AR, Caughey AB, Roth JA. A Budget Impact Analysis of Gene Therapy for Sickle Cell Disease: The Medicaid Perspective. JAMA Pediatr. 2021 Jun 1;175(6):617–623. doi: 10.1001/jamapediatrics.2020.7140. Erratum in: JAMA Pediatr. 2021 Jun 1;175(6):647. PMID: 33749717; PMCID: PMC7985816. Accessed at *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7985816/.*

are not finalizing a new RXC or other model adjustments for sickle cell gene therapy drugs for the 2025 benefit year. We intend to continue to assess sickle cell gene therapy drugs to consider whether model updates for future benefit years are warranted to address their anticipated costs. In response to the comment that HHS should continue to group HCCs 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major), we note that we removed the grouping of HCC 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and HCC 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) in the adult and child models in the 2025 benefit year risk adjustment model factors because we found in our analysis that HCC 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and HCC 71(Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) each pose sufficient independent risk characteristics to sever the grouping. Additionally, we kept the hierarchical relationship between the HCC 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major), therefore, we do not allow the coefficient for HCC 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) to be higher than HCC 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero). These updates to HCCs 70 (Sickle-Cell Anemia (Hb-SS) and Thalassemia Beta Zero) and 71 (Sickle-Cell Disorders, Except Sickle Cell Anemia (Hb-SS) and Thalassemia Beta Zero; Beta Thalassemia Major) were also informed by and align with the reclassified Medicare Part C V28 CMS–HCCs.[51]

We also did not propose and are not finalizing the addition of PrEP as an RXC in the 2025 benefit year adult risk adjustment models. As explained in the 2021 Payment Notice (85 FR 29164, 29187), we have not incorporated PrEP as an RXC because, as a general principle, RXCs are incorporated into the HHS risk adjustment adult models to impute a missing diagnosis or indicate severity of a diagnosis. Since the use of PrEP is currently recommended as a preventive service for persons who are not infected with HIV and are at high risk of HIV infection, the use of PrEP does not adequately represent risk due to an active condition and would be inconsistent with this principle (that RXCs are incorporated into HHS risk adjustment adult models to impute a missing diagnosis) to add it as an RXC at this time. However, like previous years, we reassessed the use and availability of the different types of PrEP in the market as we developed the 2025 benefit year risk adjustments models. Our most recent analysis affirmed our prior findings that the use of PrEP does not represent an active condition. In addition, as we have done in previous years, we incorporated 100 percent of the PrEP costs for enrollees without HIV diagnosis or treatment in the simulation of plan liability for purposes of recalibrating the adult and child models. We further note that enrollees in risk adjustment covered plans that use PrEP drugs in combination with another HIV treatment drug that map to RXC 01 (HIV/AIDS) will still receive credit for RXC 01 (HIV/AIDS) in the 2025 benefit year of risk adjustment. We intend to continue to explore the treatment of PrEP in the risk adjustment models to consider whether changes are needed in future benefit years, as appropriate.

We also did not propose and are not finalizing changes to add an RXC to the HHS risk adjustment model's treatment for Tepezza, which treats thyroid eye disease. Under the HHS risk adjustment models, thyroid eye disease (thyrotoxicosis) is currently captured within the non-payment HCC, HCC33 (Other Endocrine/Metabolic/Nutritional Disorders) and all RXCs in the HHS risk adjustment adult models are associated with a payment HCC. For this reason, HHS did not propose and is not finalizing any changes with respect to the treatment of Tepezza for thyroid eye disease in the 2025 benefit year risk adjustment models. However, HHS intends to continue analysis of thyrotoxicosis and the use of Tepezza as more data becomes available and consider its treatment in risk adjustment models for future benefit years.

Lastly, the change identified by some commenters in the RXC coefficients relative to the 2023 benefit year is due to decisions we made starting in the 2024 benefit year regarding the trending costs for traditional and specialty drugs, which have been trended separately from medical expenditures since the 2017 benefit year.[52] As stated in the 2024 Payment Notice,[53] in our annual assessment of the trending factors for the 2024 HHS risk adjustment models, we determined that the trend factors used for specialty drugs were higher than the market data supported. Therefore, for the 2024 benefit year, we used trend factors for specialty drugs that aligned with the market data rather than continuing use of the historical, higher trend factors. In determining these trend factors, we consulted our actuarial experts, reviewed relevant URRT submission data, analyzed multiple years of enrollee-level EDGE data, and consulted NHEA data as well as external reports and documents[54] published by third parties. In this process, we also ensured that the trends we used reflected changes in cost of care rather than gross growth in expenditures.

In our annual recalibration of the 2025 risk adjustment models, we continued the approach used for the 2024 benefit year, again reflecting the lower market-supported trend factors for specialty drugs rather than the historical, higher trend factors we used in benefit years prior to 2024. While there was a change to RXC 01 (HIV/AIDS) between the 2023 benefit year and the 2024 benefit year, the decrease between the final 2024 risk adjustment models and the 2025 risk adjustment models was much smaller in magnitude (from 4.669 to 4.345 for silver plans; a 6.9 percent decrease) and is consistent with normal year-to-year variation. For example, over the period between 2018 model recalibration (when RXCs were first introduced) and 2023 model recalibration (the last model recalibration before the change to the trending approach), the median year-to-year absolute change (that is, increase or decrease) across all silver RXC coefficients was 10.7 percent. The 6.9 percent decrease seen in RXC 01 (HIV/AIDS) between the 2024 and 2025 model recalibrations is therefore well within the range of changes that we normally see year-to-year.

[51] See, for example, the Advance Notice of Methodological Changes for Calendar Year (CY) 2024 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies (February 1, 2023). *https://www.cms.gov/files/document/2024-advance-notice-pdf.pdf.*

[52] See 81 FR 12218.

[53] See 88 FR 25753.

[54] See, for example, ''How much is health spending expected to grow?'' by the Peterson-Kaiser Family Foundation, available at *https://www.healthsystemtracker.org/chart-collection/how-much-is-health-spending-expected-to-grow/*. See also ''Medical cost trend: Behind the numbers 2024'' by PwC Health Research Institute, available at *https://www.pwc.com/us/en/industries/health-industries/library/assets/pwc-behind-the-numbers-2024.pdf.* See also ''MBB Health Trends 2023'' by MercerMarsh Benefits, available at *https://www.marsh.com/na/services/employee-health-benefits/insights/health-trends-report.html.*

For these reasons, we believe the trend factors we currently use for specialty drugs are appropriate and reflect the most recent trends we have seen in the market, and that the prior model trend factors were too high relative to the actual state of the current market. We believe the RXC coefficient values that we finalize in this rule reflect the appropriate amount of growth between the data years used to fit the models and the 2025 benefit year. As part of our annual model recalibration activities, we intend to continue to reassess the trend factors used to update the HHS risk adjustment models, including those specific to specialty drugs, in future benefit years.

Comment: Some commenters requested HHS not remove GLP–1 drugs from RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) and instead make market pricing adjustments to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) due to the expanded use of GLP–1 drugs in the market. Commenters mentioned the significant pricing changes that occurred between the data years used to recalibrate the models and the applicable benefit year of risk adjustment as support for making market pricing adjustments or other updates to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) to account for the costs and expanded use of GLP–1 drugs. These commenters stated they did not believe the current HHS risk adjustment models represent the increase in cost of diabetes treatment using GLP–1 drugs due to increased utilization since the 2021 benefit year. These commenters noted that cost and utilization trends for GLP–1 drugs are expected to continue to change, as GLP–1 drugs are relatively new treatment for chronic weight management. Another commenter expressed concerns about the off-label usage of GLP–1 drugs and preserving the integrity of RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only).

Response: We did not change the inclusion of GLP–1 drugs in RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only), or propose to change our current approach to RXC inclusion in recalibrating the adult models using the final, fourth quarter (Q4) RXC mapping document that was applicable for each benefit year of data that is included in the current year's model recalibration.[55] However, in developing the proposed 2025 benefit year risk adjustment models and coefficients, we considered our treatment of GLP–1 drugs using our previous established criteria on inclusion and exclusion of drugs in model recalibration. Specifically, as we explained in the 2023 Payment Notice (87 FR 27208, 27231 through 27235), in extenuating circumstances where HHS believes there would be a significant impact from a change in an RxNorm Concept Unique Identifiers (RXCUI) to RXC mapping, we will consider whether changes to the RXCUI to RXC mapping from the applicable data year crosswalk are appropriate.

As background, RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) is a pharmacotherapeutic class of drugs, which contains a broad array of anti-diabetic medications that vary in cost. RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) does not include all GLP–1 drugs currently on the market; drugs that carry an FDA indication for chronic weight management are excluded from RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only). The RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) coefficient in the HHS risk adjustment adult models is meant to reflect the average enrollee cost for individuals being treated by any of the drugs in this class. To assess the current mapping of certain GLP–1 drugs to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) and whether any changes were warranted, we considered the positive predictive value (PPV) of these drugs. The PPV is a conditional proportion of patients who are diagnosed with the HCC and prescribed a drug (''drug'' defined as a single RXCUI) [56] to the total patients prescribed that drug. A PPV of 100 percent means that all enrollees taking a drug within a RXCUI had the associated HCC, and a PPV of 0 percent means that none of the enrollees taking a drug within a RXCUI had the associated HCC. In our analysis for the proposed rule, we found a marginal downward trend in the PPVs for the GLP–1 drugs mapping to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) in the enrollee-level EDGE data years used to recalibrate the 2025 benefit year risk adjustment models. Based on comments received for the proposed rule, we reassessed PPVs for the GLP–1 mapping to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) using the 2022 benefit year enrollee-level EDGE data, and we found that the GLP–1 drugs have high enough PPVs that they did not warrant exclusion under our criteria and that the enrollees' use of certain GLP–1 drugs in the market remains indicative of the condition, meaning we do not see PPVs indicative of a large enough change in clinical indications or practice patterns to warrant a change to the current mapping of GLP–1 drugs to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only). It is not clear how the trend in PPV of these drugs will continue, but we believe that further years of enrollee-level EDGE data are needed to evaluate this trend. For these reasons, at this time, we did not propose and are not making mapping changes for GLP–1 drugs to RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only). As more enrollee-level EDGE data becomes available, HHS will continue to reassess the PPVs of GLP–1 drugs for potential future targeted changes as part of our ongoing efforts to continually improve the precision of the HHS risk adjustment models.

In addition, HHS did not propose and is not finalizing the application of a pricing adjustment for GLP–1 drugs in the risk adjustment models. As discussed above, the only such adjustment that HHS currently applies is the market pricing adjustment to the plan liability associated with Hepatitis C drugs in the HHS risk adjustment models for the narrow purpose of accounting for significant pricing changes between the data years used for recalibrating the models and the applicable benefit year of risk adjustment as a result of the introduction of new and generic Hepatitis C drugs. We do not expect similar significant pricing changes of GLP–1 drugs between the data years used to recalibrate the models and the applicable benefit year of risk adjustment to justify applying a similar pricing adjustment to GLP–1 drugs under RXC 07 (Anti Diabetic Agents, Except Insulin and Metformin Only) at this time. We understand GLP–1 drug utilization patterns are changing and HHS will continue to assess any new drugs and any change in costs as more enrollee-level EDGE data become available for potential targeted refinements to the HHS risk adjustment models, as appropriate.

Comment: A few commenters recommended assessing the behavioral HCC coefficients, such as HCC 102 (Autistic Disorder), to consider the impact of State benefit mandates in creating cost and utilization differentials

[55] 87 FR 27231 through 27235.

[56] Drugs that appear on claims data, either through National Drug Codes (NDCs) or Healthcare Common Procedural Coding System (HCPCS), are cross walked to RXCUIs. RXCUI mappings are always matched to the NDCs and HCPCS applicable to the particular EDGE data year as the NDC and HCPCS reflect the drugs that were available in the market during the benefit year.

that reduce the ability of HCC coefficients to accurately reflect costs. These commenters suggested the State-to-State differences in plan liabilities for treating autistic disorder are likely the result of State coverage mandates for behavioral analysis. These commenters recommended HHS consider remedies that might be appropriate to mitigate coefficients that are too low to cover treatment costs in States with these benefit mandates. One commenter specifically noted that we should ensure that the HCC 102 (Autistic Disorder) coefficient fully reflects the cost of treating children with this diagnosis.

Response: HHS did not propose and is not finalizing changes to the behavioral HCC factors. The HHS risk adjustment models are national models developed using nationwide data that apply in all States where the HHS-operated risk adjustment program exists, which for the 2025 benefit year includes all States and the District of Columbia. Because these models are used nationally, they are intended to reflect the relative national average costs for HCCs and do not produce separate results based on State variations in plan liability, actuarial risk, or costs. Based on our experience in developing the HHS risk adjustment models, we have found that use of the nationwide dataset is often necessary to ensure that we have adequate sample size and stability in our risk adjustment models, including the models' factors and coefficients. We note that while the 2021 benefit year enrollee-level EDGE data has a field that allows the data to be aggregated by State, the 2019 and 2020 benefit years of enrollee-level EDGE data being used to recalibrate the risk adjustment models for the 2025 benefit year do not contain the State field.[57] Therefore, our ability to analyze potential State variations and trends in the recalibration sample is currently limited. We intend to analyze additional years of enrollee-level EDGE data, which will contain the State indicator in the future. We also note that HHS continuously performs analysis on model performance to ensure the current model coefficients are appropriate. For example, we conduct regular out-of-sample model evaluations that support continued model improvement efforts to evaluate how accurately the models predict plan liability for various groups of enrollees and health plans. Using out-of-sample 2021 data, we evaluated the final payment year 2024 blended factors (calibrated using 2018–2020 data) and the final payment year 2021 blended factors (calibrated using 2015–2017 data). Outcomes of these evaluations were generally as expected and indicate that the national risk adjustment models are performing at a reasonable level.

Comment: Several commenters stated that the 2025 benefit year risk adjustment models will undercompensate issuers for enrollees with serious chronic conditions where coefficients have declined, which they stated would incentivize issuers to avoid these enrollees. A few commenters recommended that we update the risk adjustment models so that the coefficients are additive rather than hierarchical for the HCCs for kidney failure and transplant hierarchy, including HCCs 183 (Kidney Transplant Status/Complications), 184 (End Stage Renal Disease), 187 (Chronic Kidney Disease, Stage 5), and 188 (Chronic Kidney Disease, Severe (Stage 4)). One commenter stated that over the past several model recalibrations, they observed a steady decline in the proportion of aggregate issuer risk scores that are attributable to clinical factors and an increase in the proportion of risk scores attributable to demographic factors.

Response: We understand commenters' concerns about ensuring the HHS risk adjustment models adequately compensate issuers of risk adjustment covered plans for enrollees with serious chronic conditions. Several factors may contribute to the trend commenters observed with respect to declining HCC coefficients. For example, such a decline is expected in HHS risk adjustment models as diagnostic coding trends toward being more thorough and complete which results in capturing more HCCs per enrollee over time.[58] As a result of this improved coding, some enrollees would have more HCCs count towards their risk score with each HCC individually contributing a smaller amount towards the enrollee's overall risk score. Consequently, because enrollees are likely to have more HCCs, the lower coefficients do not necessarily result in lower risk scores for enrollees with multiple HCCs.

Additionally, the observed decreases in coefficients can also be attributed to the revised interacted HCC counts model specification that was introduced beginning with the 2023 benefit year HHS risk adjustment adult and child models because this model specification shifts some of the predicted risk score away from the individual HCC coefficients and towards the severe interacted counts for the sickest enrollees. Specifically, in the 2023 Payment Notice (87 FR 27208, 27221 through 27230), HHS finalized major changes to add the interacted HCC counts model specifications to the adult and child models.[59] As discussed in the 2021 HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes,[60] the purpose of the interacted HCC counts model specifications is to address the identified underprediction of plan liability in the adult and child models for the very highest-risk enrollees (that is, those in the top 0.1 percentile and those enrollees with the most HCCs) because while this highest-risk subpopulation represents a small number of enrollees, it represents a large portion of expenditures. However, the impact of the interacted HCC counts model specification is that risk scores for some severe HCCs and for enrollees with severe HCCs and fewer comorbidities decrease, while risk scores for enrollees with severe HCCs and more comorbidities increase. Therefore, overall coefficient changes due to trends in coding and model changes such as the interacted HCC counts model specification would lead to lower risk scores for some enrollees and higher risk scores for others.

As part of our effort to strive for continual improvement of the precision of the HHS risk adjustment models, our intention is to monitor the impact of changes in the risk adjustment models over the years to consider whether additional changes or modifications are needed. To do this, we will continue to conduct analysis on the models and the models' predictions before considering whether changes are needed. Similarly, if we were to consider making changes to the models to restructure hierarchies (that would change whether certain HCCs could be additive) we would need to further assess the impact of those

[57] 87 FR 27241 through 27244. In the 2024 Payment Notice at 88 FR 25781, we finalized the proposal to extract plan ID and rating area data elements issuers have submitted to their EDGE servers from certain benefit years prior to 2021. However, at this time, HHS has not completed that the extraction and development of updated datasets for model recalibration using plan ID and rating area data from the benefit years prior to 2021.

[58] See Figure 4. Summary Report on Permanent Risk Adjustment Transfer for the 2022 Benefit Year *https://www.cms.gov/files/document/summary-report-permanent-risk-adjustment-transfers-2022-benefit-year.pdf.*

[59] See also Chapter 4 on Improving Predictive Accuracy for the Very Highest-Risk Enrollees—Interacted HCC Counts in the HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes (2021, October 26) at: *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

[60] HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. (2021, October 26). CMS. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

changes before proposing those changes. As major risk adjustment model changes were finalized beginning with the 2023 benefit year, we seek to observe and analyze the outcome of those changes before considering other major changes to the HHS risk adjustment models and therefore, we are not considering changes to the kidney transplant HCCs at this time as the kidney transplant HCC is part of the interacted HCC counts model specification.

Lastly, we note that beginning with the 2023 benefit year, we also made substantial model changes intended to address observed underprediction of healthy enrollees that included the inclusion of the interacted HCC counts model specification in the adult and child models and the HCC-contingent enrollment duration factor updates in the adult models. For example, since the 2023 benefit year risk adjustment models, all costs for partial year with no-HCC-or-RXC enrollees are recalibrated into the age-sex factors.[61] Thus, as a result of these model specification changes, the age-sex factors increased in the 2023 benefit year risk adjustment models. Since the 2023 benefit year, we have observed that on average, age-sex coefficient values have remained stable, suggesting that the total risk attributable to these factors for the average enrollee is unchanged. We do not yet have the data for risk adjustment benefit years 2024 or 2025, but any proportional changes in risk attributable to demographic factors would likely depend on changes in the population being enrolled and model changes.

Comment: A few commenters requested additional transparency in the determination of coefficients for the HHS risk adjustment models by making the full details of the methodology used for recalibration of the risk adjustment models publicly available to increase predictability for plans and therefore reduce plan incentives for discriminatory behavior used to protect the plans from future changes and for interested parties to have a better understanding of the rationale behind the updates to the HHS risk adjustment models. These commenters stated that this enhanced transparency would increase public confidence in the coefficients.

Response: We understand the importance of transparency, but do not believe it is necessary to release additional information on the risk adjustment model recalibration methodology at this time. Since the program's inception, we have released several risk adjustment technical papers [62] [63] [64] [65] and rules that describe the key program goals that informed development of the HHS risk adjustment models, explain our HCC diagnostic classification, provide information on the data and methods used to develop the models for each age group (adult, child, and infant) and metal level (platinum, gold, silver, bronze, as well as catastrophic plans), and discuss updates to the models over the years. We share similar information as part of the discussion of the annual model recalibration proposals in the applicable benefit year's Payment Notice, and when we identify areas for targeted refinements to improve model prediction along with potential options to address the identified issues, including the rationale for those options. Whether engaging in the annual model recalibration activities or identifying potential refinements and options to address identified issues, we are mindful of the role risk adjustment can play in reducing plan incentives for discriminatory behavior. By way of example, the current HHS risk adjustment adult and child models aim to reduce plan incentives for discriminatory behavior through methods like the recently adopted interacted HCC counts model specification that seeks to more accurately reflect anticipated plan liability for the sickest enrollees. The current HHS risk adjustment adult models were also recently updated with new HCC-contingent enrollment duration factors that seek to improve the prediction of plan liability for partial year enrollees. We provided a technical paper on these changes [66] and also addressed them in notice and comment rulemakings.[67] Our intention is to continue to provide technical papers where appropriate, such as when considering major modeling changes and engage in rulemaking to share a complete description of the applicable benefit year's models and any applicable updates to increase predictability for plans where possible. We also remain committed to continuing to test the performance of the models as part of our ongoing efforts to identify potential areas for targeted refinements to improve the prediction of the HHS risk adjustment models. We also provide background in this rule on the data used for recalibrating the 2025 benefit year models, including the analyses of the 2021 benefit year enrollee-level EDGE data to examine the potential impact of the COVID–19 PHE. As noted, we did not find any notable anomalous trends, especially when considering that every year of data can be unique, and therefore, some level of deviation from year to year is expected. We also provided extensive background when making significant model updates in the 2021 Payment Notice,[68] as well as in the technical paper released in 2019 that considered potential future HCC changes and our associated analyses of those changes.[69]

Comment: Several commenters supported the continued inclusion of HCC 23 (Protein-Calorie Malnutrition) as a payment HCC in the 2025 benefit risk adjustment models due to the high-costs of malnutrition care, and malnutrition's negative effect on health care utilization and outcomes. These commenters also expressed concern about health equity related to malnutrition and the importance of prioritizing policies that identify and treat malnutrition.

Response: We agree with the commenters and continue to believe HCC 23 (Protein-Calorie Malnutrition) is appropriate for continued inclusion in the HHS risk adjustment models for the individual, small group, and merged markets as a predictor of costs. We recognize that the CMS–HCC risk adjustment models used for Medicare Advantage recently removed this HCC from its models; however, we did not propose any changes to the treatment of HCC 23 (Protein-Calorie Malnutrition) in the 2025 benefit year HHS risk

[61] Prior to the adoption of the HCC-contingent enrollment duration factors, risk from partial year, no-HCC-or-RXC enrollees was split between the age-sex factors and the enrollment duration factors defined using the previous model structure.

[62] HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. (2021, October 26). CMS. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

[63] 2016 Risk Adjustment White Paper (2016, March 31). CMS. *https://www.cms.gov/cciio/resources/forms-reports-and-other-resources/downloads/ra-march-31-white-paper-032416.pdf.*

[64] Potential Updates to HHS–HCCs for the HHS-operated Risk Adjustment Program. (2019, June 18). CMS. *https://www.cms.gov/cciio/resources/regulations-and-guidance/downloads/potential-updates-to-hhs-hccs-hhs-operated-risk-adjustment-program.pdf.*

[65] Risk Adjustment Implementation Issues. (2011, September 12). CMS. *https://www.cms.gov/CCIIO/Resources/Files/Downloads/riskadjustment_whitepaper_web.pdf.*

[66] HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. (2021, October 26). CMS. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

[67] 86 FR 24155 through 24162 and 87 FR 27221 through 27231.

[68] 85 FR 29164 at 29173 through 29185.

[69] Potential Updates to HHS–HCCs for the HHS-operated Risk Adjustment Program. (2019, June 18). CMS. *https://www.cms.gov/cciio/resources/regulations-and-guidance/downloads/potential-updates-to-hhs-hccs-hhs-operated-risk-adjustment-program.pdf.*

adjustment models, and therefore, HCC 23 (Protein-Calorie Malnutrition) will continue to be included as a payment HCC and 2025 benefit year model factor as proposed for the adult, child, and infant models for the HHS-operated risk adjustment program applicable to the individual, small group, and merged markets.

Comment: One commenter recommended allowing capitated claims without diagnoses to be submitted to the EDGE server, stating that the claims costs associated with capitated claims without diagnoses represent a large portion of medical costs. This commenter stated that this exclusion of capitated claims without diagnoses exacerbates the HHS-operated risk adjustment program's underprediction of lower-cost enrollees.

Response: A critical component of the HHS-operated risk adjustment program is mapping of diagnosis codes from the EDGE server to HCCs in the risk adjustment models and therefore, only claims with diagnosis codes [70] are allowed to be submitted to an issuer's EDGE server as these diagnosis codes are a critical component to the HHS-operated risk adjustment program's determination of actuarial risk and consideration for risk adjustment transfers. Should a capitated claim have a diagnosis, issuers may submit the claim to their EDGE server. Should a capitated claim not have a diagnosis, issuers may obtain diagnosis code(s) for the claim as directed in HHS guidance published in the EDGE Server Business Rules (ESBR) [71] Section 8 Supplemental Diagnosis Code File Processing, which includes specific guidelines regarding acceptable sources of diagnosis code(s) for claims data submissions to EDGE servers that accounts for unique health delivery models. Certain issuers who mainly submit capitated claims to their EDGE server should therefore ensure those claims have diagnosis codes and can use the ESBR to identify acceptable sources of diagnosis codes for claims data submitted to their respective EDGE servers.[72] HHS encourages all issuers of risk adjustment covered plans, whether they submit capitated or non-capitated claims, to work with providers to ensure claims contain the relevant diagnosis code(s).

We also note that while HHS currently excludes enrollees with capitated claims for purposes of the risk adjustment model recalibration activities,[73] we plan to continue to evaluate this data and whether to include these enrollees in recalibrating the models in future benefit years.

d. Cost-Sharing Reduction Adjustments

We proposed to recalibrate the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing CSR plan variant enrollees for the 2025 benefit year, and to retain these proposed AI/AN CSR adjustment factors, if finalized, for all future benefit years unless changed through notice and comment rulemaking. We also proposed to maintain the current CSR adjustment factors for silver plan variant enrollees (70 percent, 73 percent, 87 percent, and 94 percent AV plan variants) [74] for the 2025 benefit year, as well as proposed to retain the same factors for the 2026 benefit year and beyond, unless changed through notice and comment rulemaking. The proposed 2025 Payment Notice provided our reasoning for our proposals and the history of inclusion of the CSR adjustment factors in HHS-operated risk adjustment as well as our analysis of these factors' performance.[75] In short, based on analysis of all CSR adjustment factors, HHS proposed to not make changes to the CSR adjustment factors, with the exception of the AI/AN CSR plan variant factors.[76] As explained in the proposed rule, our continued study of CSR adjustment factors found that adjustments for AI/AN CSR plan variant enrollees were needed and would be appropriate [77] because the AI/AN CSR plan variant enrollees experienced higher expenditures than non-CSR silver enrollees, which may reflect increased demand associated with enrollee receipt of the AI/AN zero cost sharing or limited cost sharing CSR plan variants or risk characteristics specific to the AI/AN population which are not specifically captured by HCCs or other model factors.[78] To address concerns about this observed underprediction among AI/AN CSR plan variant enrollees, we proposed to update the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing plan variants and use the proposed factors for these enrollees as shown in Table 7.

TABLE 7—CSR ADJUSTMENT FACTORS FOR THE 2025 BENEFIT YEAR AND BEYOND

Plan AV	Current adjustment factors for the 2024 benefit year	Adjustment factors for the 2025 benefit year and beyond
Silver Plan Variant Recipients (and Enrollees in State wrap-around or Medicaid-expansion plans of any metal level, as applicable)		
Plan Variation 94%	1.12	1.12
Plan Variation 87%	1.12	1.12
Plan Variation 73%	1.00	1.00
Standard Plan 70%	1.00	1.00

[70] The only exception to this use of diagnosis codes to determine actuarial risk is the High-Cost Risk Pool, which uses claims costs.

[71] Centers for Medicare & Medicaid Services, Center for Consumer Information and Insurance Oversight (CCIIO). (Dec. 2023). EDGE Server Business Rules (ESBR) Version 24.0. *https://regtap.cms.gov/reg_librarye.php?i=3765* (Login Required).

[72] *https://regtap.cms.gov/reg_library_openfile.php?id=2183&type=k&pid=3* (Login Required).

[73] Enrollees with at least one capitated claim in EDGE are excluded from recalibration because we have some concerns that the methods for computing and reporting derived amounts from capitated claims could be inconsistent across issuers and would not provide reliable or comparable data.

[74] See 83 FR 16930 at 16953; 84 FR 17478 through 17479; 85 FR 29190; 86 FR 24181; 87 FR 27235 through 27236; and 88 FR 25772 through 25774.

[75] 88 FR 82510 at 82545 through 82548.

[76] In the 2021 Risk Adjustment Technical Paper, we concluded that, in aggregate, most of the current CSR adjustment factors contribute to a reasonable prediction of what plans are paying for CSR enrollees, with the exception of CSR adjustment factors for AI/AN enrollees. Our continued study of these issues, including the more recent analysis of 2021 benefit year data, affirmed these initial conclusions. Therefore, we proposed and are finalizing in this rulemaking updates to the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing plan variants while maintaining the existing CSR adjustment factors for other enrollees. See 88 FR 82510 at 82545 through-82548. Also see Appendix A, HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. (2021, October 26). CMS. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

[77] 88 FR 82510 at 82545 through 82548.

[78] HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. (2021, October 26). CMS. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

TABLE 7—CSR ADJUSTMENT FACTORS FOR THE 2025 BENEFIT YEAR AND BEYOND—Continued

Plan AV	Current adjustment factors for the 2024 benefit year	Adjustment factors for the 2025 benefit year and beyond
Zero Cost Sharing Plan Variant Recipients (that is, AI/AN Recipients)		
Platinum (90%)	1.00	1.31
Gold (80%)	1.07	1.39
Silver (70%)	1.12	1.46
Bronze (60%)	1.15	1.51
Limited Cost Sharing Plan Variant Recipients (that is, AI/AN Recipients)		
Platinum (90%)	1.00	1.04
Gold (80%)	1.07	1.10
Silver (70%)	1.12	1.15
Bronze (60%)	1.15	1.19

Lastly, separate from the policy pertaining to AI/AN CSR adjustment factors, we noted that for all plan liability risk score calculations under the State payment transfer formula, we use the CSR adjustment factor that aligns with the AV of the applicable plan for the enrollee. Thus, for unique State-specific plans, we apply the CSR adjustment factors that correspond to each plan's AV. However, this approach does not apply in the case of States whose State-specific plans take the form of Medicaid expansion plans offered on the Exchange (for example, Arkansas), because these plans are identical in all their parameters, including AV and degree of plan liability, to other plans offered on the Exchange in those States and are differentiated from their comparable plans only in eligibility criteria and sources of funding.[79] As we identify unique State-specific plans that have higher plan liability than the standard plan variants, such as those in Massachusetts, we work with the relevant State Department of Insurance and other relevant State agencies to identify the applicable CSR adjustment factor that corresponds to the unique State-specific plan's AV.[80] We explained that we will continue to follow this approach, working with the State to identify the applicable CSR adjustment factor that corresponds to that State's unique State-specific plan's AV, unless changed through notice and comment rulemaking.

We sought comment on these proposals and policies. After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these provisions and policies as proposed. We summarize and respond to public comments received on the proposed CSR adjustment factors and related policies below.

Comment: Several commenters supported the proposed recalibration of the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing plan variant enrollees for the 2025 benefit year and beyond because the recalibration would better capture increased utilization from zero-cost sharing and limited cost sharing enrollments and mitigate incentives that could discourage issuers from enrolling AI/AN populations. These commenters stated that the adjustments will have the effect of stabilizing premiums and incentivizing issuers to enroll the AI/AN population. Another commenter recommended HHS continue to monitor the predictive ratios of the CSR adjustment factors for the AI/AN population to ensure that they accurately estimate additional plan liabilities associated with these enrollments and to make further adjustments, as needed.

One commenter, who did not oppose recalibrating the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing plan variant enrollees, preferred to comprehensively reform how CSR variants are handled in HHS-operated risk adjustment program, such as creating CSR specific risk adjustment models and modifying the rating term [81] to reflect issuer silver loading practices.

[79] The structure of wrap-around plans in some States, such as Massachusetts, differs from the coverage in States who offer Medicaid expansion plans on the Exchange. For example, in Massachusetts, the higher cost sharing wrap-around plans are variations of lower cost sharing plans. As such, the Massachusetts wrap-around plans do not have the same AVs as their comparable plans. That is why we use a CSR adjustment factor of 1.12 for all Massachusetts wrap-around plans with AVs above 94 percent. In contrast, Arkansas' Medicaid expansion plans are identical to other 94 percent and 100 percent AV CSR plan variants offered on the Exchange and are distinguished from these identical plans only in their sources of funding and eligibility criteria. As such, we presently direct issuers in Arkansas who provide Medicaid expansion plans with AVs of 94 percent and 100 percent to use specified plan variant codes for their Medicaid expansion plans only to differentiate the sources of funding and to differentiate between populations eligible for the Medicaid expansion plans from those who are eligible for standard 94 percent and 100 percent AV CSR plan variants. Because the Arkansas Medicaid expansion plans are identical to other 94 percent and 100 percent AV CSR plan variants available in Arkansas and therefore have the same AVs, we would use the proposed CSR adjustment factor of 1.12 for Arkansas 94 percent AV Medicaid-expansion plans and the proposed CSR adjustment factor that corresponds to the silver metal level zero cost sharing variants (that is, the proposed 1.46 CSR adjustment factor for zero cost sharing variants) for Arkansas 100 percent AV Medicaid-expansion plans in the plan liability risk score calculation. See CMS approval of Arkansas's section 1115(a) demonstration, ''Arkansas Health and Opportunity for Me.'' *https://www.medicaid.gov/sites/default/files/2021-12/ar-arhome-ca.pdf.*

[80] For a list of the unique State-specific CSR levels that have higher plan liability than the standard plan variants, for which we utilize the corresponding CSR adjustment factor that maps to the plan's AV, refer to the applicable benefit year's DIY Software on the CMS website. See, for example, the 2023 Benefit Year DIY Software on the CMS website (January 9, 2024). *https://www.cms.gov/files/zip/hhs-hcc-software-v0723141c3.zip.*

[81] The State payment transfer formula may be understood to be composed of two key higher-level terms, the risk term and the rating term. The risk term generally defines the revenue required by a plan (relative to the Statewide market average). It is determined by three component variables, the plan liability risk score (PLRS), which reflects the plan's AV as well as the plan's enrollee health status risk; the induced demand factors (IDF), which reflects the anticipated induced demand associated with the plan's cost-sharing (metal) level, and the geographic cost factor (GCF), which accounts for differences in premium due to allowable geographic rating variation. The rating term defines the revenue that a plan can be expected to generate given the allowable rating factors (relative to the Statewide market average). It is determined by four component variables: AV, which adjusts for relative differences between the plan actuarial value in a market; an Allowable Rating Factor (ARF), which accounts for the impact of allowable rating factors (age or family tier) based on State rating method; an IDF; and a GCF. For more information see section 1.2.3 of the in the HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes (2021, October 26) at:

Continued

Response: We are finalizing as proposed the updates to the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing CSR plan variant enrollees for the 2025 benefit year, and to retain these AI/AN CSR adjustment factors, along with the CSR adjustment factors for other enrollees, for future benefit years unless changed through notice and comment rulemaking. We agree with commenters that these targeted refinements to the AI/AN CSR adjustment factors would better capture increased utilization from zero-cost sharing and limited cost-sharing enrollments and help mitigate incentives that could discourage issuers from enrolling AI/AN populations. We also intend to continue to study the non-AI/AN CSR adjustment factors for potential updates in future benefit years, as may be appropriate.

We did not propose and are not finalizing comprehensive changes to risk adjustment, such as changes to the rating term in the State payment transfer formula,[82] to account for CSR plans and silver loading in this final rule. In Appendix A of the 2021 HHS-Operated Risk Adjustment Technical Paper on Possible Model Change,[83] we outlined a variety of policy options, including a change to the rating term in the State payment transfer formula, that we have considered to improve the precision of the HHS risk adjustment models and better account for CSR plan variants and issuer silver loading practices. We continue to consider policy options and conduct additional analyses on potential changes in this area before considering whether to propose any comprehensive reform of how CSR plan variants are handled in the HHS-operated risk adjustment program. If we were to pursue such comprehensive changes to the treatment of CSR plans in the HHS-operated risk adjustment program, we would propose and solicit comments on those types of changes in future notice and comment rulemaking.

Comment: One commenter recommended that HHS increase the Massachusetts wrap-around CSR adjustment factor from the current 1.12 factor (which aligns with the CSR adjustment factor for plans with actuarial value (AV) of 94 percent) because Massachusetts wrap-around plans have higher AVs (99.7 percent and 96.1 percent AVs) than a 94 percent AV plan. This commenter explained that Massachusetts used higher CSR adjustment factors between 2014 and 2016 benefit years when the State operated its own risk adjustment program, and those factors were lowered when Massachusetts transitioned into the HHS-operated risk adjustment program beginning with the 2017 benefit year.[84] Another commenter appreciated that the HHS Federally certified risk adjustment methodology accounts for Massachusetts-specific market factors resulting from the design of the ConnectorCare program.

Response: As we noted in the proposed rule, for all plan liability risk score calculations under the State payment transfer formula, we use the CSR adjustment factor that aligns with the AV of the applicable plan for the enrollee. Thus, for unique State-specific plans, we apply the CSR adjustment factors that correspond to each plan's AV. When we identify unique State-specific plans that have higher plan liability than the standard plan variants, we work with the relevant State Department of Insurance and other relevant State agencies to identify the applicable CSR adjustment factor that corresponds to the unique State-specific plan's AV.[85] HHS worked with Massachusetts for the 2014 through 2016 benefit years when the State established its CSR adjustment factors for use in its State-based risk adjustment program to account for its wraparound plans [86] and when Massachusetts transitioned into the HHS-operated risk adjustment program beginning in the 2017 benefit year, we continued to work with Massachusetts to incorporate CSR adjustment factors into the HHS-operated risk adjustment program for Massachusetts' wraparound plans and set them as a 1.12 factor.[87] As detailed in the 2014 Payment Notice,[88] the CSR adjustment factors in the Federally certified risk adjustment methodology applicable in States where HHS operates the risk adjustment program (specifically calibrated for target AVs of 73 percent, 87 percent and 94 percent) may not be adequate for Massachusetts. To overcome this limitation, Massachusetts fit a polynomial trend line to the HHS proposed CSR adjustment factors by metal level, which Massachusetts extended to 100 percent.

Since then, the Massachusetts Health Connector, Massachusetts' Exchange, has consistently supported continued use of the 1.12 factor for their wraparound plans [89] and has not indicated that a change is needed. Therefore, we do not believe that it is necessary to make changes to Massachusetts wraparound CSR adjustment plan factor at this time and will continue to apply the 1.12 factor for the 2025 benefit year.

e. Model Performance Statistics

Each benefit year, to evaluate the HHS risk adjustment model performance, we examine each model's R-squared statistic and predictive ratios (PRs). The R-squared statistic measures the percentage of individual variation explained by the model. The PRs measure how accurate the model's predictions are for specific subpopulations. For a given population, the PR is defined as the ratio of the weighted mean predicted plan liability to the weighted mean actual plan liability.

A subpopulation that is predicted perfectly would have a PR of 1.0. For each of the current and proposed HHS risk adjustment models, the R-squared statistic and the PRs are in the range of published estimates for concurrent HHS risk adjustment models.[90] Because we are finalizing a blend of the coefficients from separately solved models based on the 2019, 2020, and 2021 benefit years' enrollee-level EDGE data, we are publishing the R-squared statistic for each model separately to verify their statistical validity. The R-squared statistics for the final 2025 benefit year HHS risk adjustment models are shown in Table 8.

https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.

[82] Id.

[83] See CMS. (2021, October 26). HHS-Operated Risk Adjustment Technical Paper on Possible Model Changes. Appendix A. *https://www.cms.gov/files/document/2021-ra-technical-paper.pdf.*

[84] This commenter also stated a recent study on AI/AN zero cost sharing plans' CSR adjustment factors suggests that higher CSR adjustment factors are needed for the three ConnectorCare plans, but the commenter did not cite the study; therefore, we were not able to verify the study's findings that the commenter was highlighting.

[85] For a list of the unique State-specific CSR levels that have higher plan liability than the standard plan variants, for which we utilize the corresponding CSR adjustment factor that maps to the plan's AV, refer to the applicable benefit year's DIY Software on the CMS website. See, for example, the 2023 Benefit Year DIY Software on the CMS website (January 9, 2024). *https://www.cms.gov/files/zip/hhs-hcc-software-v0723141c3.zip.*

[86] See 78 FR 15442.

[87] See 81 FR 12228–12229.

[88] 78 FR 15442.

[89] For examples, see for Massachusetts Health Connector's comments on the proposed 2025 Payment Notice at: *https://www.regulations.gov/comment/CMS-2023-0191-0081;* also, see the Massachusetts Health Connector's comments on the proposed 2024 Payment Notice at: *https://www.regulations.gov/comment/CMS-2022-0192-0102.*

[90] Hileman, G., & Steele, S. (2016). Accuracy of Claims-Based Risk Scoring Models. Society of Actuaries. *https://www.soa.org/4937b5/globalassets/assets/files/research/research-2016-accuracy-claims-based-risk-scoring-models.pdf.*

TABLE 8—R-SQUARED STATISTIC FOR THE 2025 HHS RISK ADJUSTMENT MODELS

Models	2019 Enrollee-level EDGE data	2020 Enrollee-level EDGE data	2021 Enrollee-level EDGE data
Platinum Adult	0.4448	0.4360	0.4174
Gold Adult	0.4394	0.4302	0.4118
Silver Adult	0.4371	0.4278	0.4094
Bronze Adult	0.4330	0.4236	0.4051
Catastrophic Adult	0.4329	0.4236	0.4051
Platinum Child	0.3569	0.3436	0.3539
Gold Child	0.3541	0.3404	0.3511
Silver Child	0.3522	0.3383	0.3491
Bronze Child	0.3491	0.3351	0.3459
Catastrophic Child	0.3490	0.3350	0.3458
Platinum Infant	0.3165	0.2913	0.3059
Gold Infant	0.3133	0.2878	0.3025
Silver Infant	0.3122	0.2865	0.3012
Bronze Infant	0.3101	0.2842	0.2989
Catastrophic Infant	0.3101	0.2842	0.2989

3. Overview of the HHS Risk Adjustment Methodology (§ 153.320)

In part 2 of the 2022 Payment Notice (86 FR 24183 through 24186), we finalized the proposal to continue to use the State payment transfer formula finalized in the 2021 Payment Notice for the 2022 benefit year and beyond, unless changed through notice and comment rulemaking. We explained that under this approach, we will no longer republish these formulas in future annual HHS notice of benefit and payment parameter rules unless changes are being proposed. We did not propose any changes to the formula in this rule, and therefore will continue to apply the formula as finalized in the 2021 Payment Notice (85 FR 29191 through 29193 [91]) in the States where HHS operates the risk adjustment program in the 2025 benefit year. We also will not republish the formulas in this rule. Additionally, as finalized in the 2020 Payment Notice (84 FR 17466 through 17468), we will maintain the high-cost risk pool parameters for the 2020 benefit year and beyond, unless amended through notice and comment rulemaking. We did not propose any changes to the high-cost risk pool parameters for the 2025 benefit year; therefore, we are maintaining the $1 million attachment point and 60 percent coinsurance rate.[92]

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the 2025 benefit year risk adjustment methodology as proposed. We summarize and respond to public comments received on the State payment transfer formula below.

Comment: One commenter recommended updating the State payment transfer formula to scale risk adjustment State transfers using State-average claims multiplied by a ratio of claims to actuarial risk, relying on medical loss ratio (MLR) claims data rather than data issuers submit to their respective distributed data environments (EDGE servers). A few commenters expressed concern that overall risk adjustment transfers are too small. Several commenters expressed concern about the potential negative consequences risk adjustment can have on new or small health insurance issuers attempting to enter the market. These commenters referred to recent plan failures that affected other carriers who are owed risk adjustment payments.

Response: We did not propose and are not finalizing changes to the use of the Statewide average premium as the scaling factor in the State payment transfer formula. We also did not propose and are not finalizing the use of MLR data instead of issuers' EDGE data to calculate risk adjustment transfers. As detailed in prior rulemakings,[93] HHS chose to use Statewide average premium to convert required revenue and allowable premium State average factors in the State payment transfer formula from relative factors to dollar amounts so that the total calculated payment amounts equal total calculated charges in each State market risk pool. Thus, each plan in the State market risk pool receives a risk adjustment State transfer payment or charge that is scaled based on the determination of plan average risk within a State market risk pool, resulting in balanced, budget-neutral transfers. Furthermore, as detailed in the 2018 Payment Notice,[94] we adopted a 14 percent reduction to the Statewide average premium to account for administrative costs that are unrelated to the claims risk of the enrollee population. To derive this parameter, we analyzed administrative and other non-claims expenses in the MLR Annual Reporting Form and estimated, by category, the extent to which the expenses varied with claims. We compared those expenses to the total costs that issuers finance through premiums, including claims, administrative expenses, and taxes, and determined that the mean administrative cost percentage in the individual, small group and merged markets is approximately 14 percent. We believe this amount represents a reasonable percentage of administrative costs on which risk adjustment should not be calculated. This approach supports the overall goal of the risk adjustment program to encourage issuers to rate for average risk and mitigates incentives for issuers to operate less efficiently, or to develop benefit designs or create marketing strategies to avoid high-risk enrollees. And, while we have not tested using Statewide average MLR claims data in the State payment transfer formula, we have concerns about whether we could operationally use MLR data for this purpose and the limitations of using the MLR data especially when compared to

[91] Discussion provided an illustration and further details on the State payment transfer formula.

[92] See 81 FR 94081. See also 84 FR 17467.

[93] See, for example, the Adoption of the Methodology for the HHS-operated Risk Adjustment Program under the Patient Protection and Affordable Care Act for the 2017 Benefit Year; Final Rule, 83 FR 36456 (July 31, 2018); and the Adoption of the Methodology for the HHS-operated Risk Adjustment Program for the 2018 Benefit Year; Final Rule, 83 FR 63419 (December 10, 2018). Also see the HHS Notice of Benefit and Payment Parameters for 2020; Final Rule, 84 FR 17454 at 17480 through 17484 (April 25, 2019).

[94] 83 FR 63419 at 63422 through 63427.

the benefits of using data issuers submit to their EDGE server for this purpose. For example, it would not be feasible to use current MLR data as the timelines for reporting for a particular benefit year of MLR data by July 31 of the year following the applicable benefit year does not align with the regulatory timeline at § 153.310(e) that requires States and HHS to notify issuers of risk adjustment payment due and charges owed by June 30 of the year following the applicable benefit year. Additionally, using the MLR data's usable claims fields for this purpose would need to be further investigated as the ''Claims Paid'' data field has several exclusions and deductions.[95] More importantly, we have previously researched using Statewide average claims as a scaling factor in the State payment transfer formula and found that it was a volatile measure, both across States within a year and across years within a State and would be sensitive to unexpected claims experience. Furthermore, unexpected claims experience could particularly cause instability for smaller issuers, thereby reducing the predictability of risk adjustment transfers.[96] For these reasons, we did not propose or otherwise consider proposing updates to use Statewide average claims or relying on MLR claims data for calculating transfers under the State payment transfer formula. We will continue to scale risk adjustment transfers based on Statewide average premiums, as they are less subject to the instability of Statewide average claims.

We continue to believe that the State payment transfer formula is working as intended by more evenly spreading the financial risk carried by health insurance issuers that enroll higher-risk individuals in a particular State market risk pool, thereby protecting issuers against adverse selection and supporting them in offering products that serve all types of consumers.[97] We also continue to find that risk adjustment transfers calculated under the State payment transfer formula as a percent of total premiums correlate with the amount of paid claims rather than issuer size,[98] and that per-member-per-month risk adjustment transfer amounts tend to be similar for smaller and larger issuers. Although we do not agree that risk adjustment is biased against new and small issuers, we have implemented policies as part of the HHS-operated risk adjustment program to assist small issuers, such as allowing issuers with 500 or fewer billable member months Statewide to be assessed a lower, separate default risk adjustment charge if they fail to set up an EDGE server, fail to submit sufficient data for HHS to calculate transfers, or otherwise opt to accept the default risk adjustment charge for a particular benefit year of risk adjustment.[99] We also do not agree with commenters that risk adjustment transfers are too small,[100] and we note that risk adjustment transfers as a percent of premium have been increasing, which is indicative of risk adjustment transfers growing, as detailed in the Summary Report on Permanent Risk Adjustment Transfer for the 2022 Benefit Year: [101]

- Nationwide, the absolute value of risk adjustment State transfers across all State market risk pools (excluding the high-cost risk pool) was about 10.4 percent of total premiums, as compared to the absolute value of 2021 benefit year State transfers, which was 8.7 percent of total premiums.
- In the 2021 benefit year, the absolute value of risk adjustment State transfers as a percent of premiums averaged 11.7 percent of premiums in the individual non-catastrophic risk pool, and 4.4 percent of premiums in the small group risk pool.
- In the 2022 benefit year, the absolute value of risk adjustment State transfers increased to 14.2 percent of premiums in the individual non-catastrophic risk pool and 4.5 percent of premiums in the small group risk pool.

We acknowledge that large risk adjustment charges can be unpredictable for small, new, or fast-growing issuers. We will continue to monitor risk adjustment implications and challenges for these issuers. HHS has regularly discussed with issuers and State regulators ways to encourage new participation in the health insurance markets and to mitigate any disruptive effects of substantial risk adjustment charges. We intend to continue these discussions and note that HHS remains committed to working with States and other interested parties to encourage new market participants, mitigate adverse selection, and promote stable insurance markets through strong risk adjustment programs. Finally, we note that to minimize the impact of issuers that fail to pay charges owed to the risk adjustment program, HHS will use all available debt collection tools to fully collect risk adjustment charges from issuers with plan failures that affected other issuers who are owed risk adjustment payments, which includes netting those charges against certain other payments owed to the issuer,[102] where applicable.

4. HHS Risk Adjustment User Fee for the 2025 Benefit Year

In the 2025 Payment Notice proposed rule (88 FR 82510, 82549), HHS proposed a risk adjustment user fee for the 2025 benefit year of $0.20 PMPM. Under § 153.310, if a State is not approved to operate, or chooses to forgo operating, its own risk adjustment program, HHS will operate risk adjustment on its behalf. For the 2025 benefit year, HHS will operate risk adjustment in every State and the District of Columbia. As described in the 2014 Payment Notice (78 FR 15416 through 15417), HHS' operation of risk adjustment on behalf of States is funded through a risk adjustment user fee. 45 CFR 153.610(f)(2) provides that, where HHS operates a risk adjustment program on behalf of a State, an issuer of a risk adjustment covered plan must remit a user fee to HHS equal to the product of its monthly billable member enrollment in the plan and the PMPM risk adjustment user fee specified in the annual HHS notice of benefit and payment parameters for the applicable benefit year.

OMB Circular No. A–25 established Federal policy regarding user fees, and specifies that a user charge will be assessed against each identifiable

[95] See CMS MLR Annual Reporting Form Filing Instructions for 2022 MLR Reporting Year at: *https://www.cms.gov/files/document/2022-mlr-form-instructions.pdf.*

[96] 84 FR 17454 at 17480 through 17482.

[97] See, for example, *Summary Report on Permanent Risk Adjustment Transfer for the 2022 Benefit Year. (2023, June 30). CMS. https://www.cms.gov/files/document/summary-report-permanent-risk-adjustment-transfers-2022-benefit-year.pdf; Summary Report on Permanent Risk Adjustment Transfer for the 2021 Benefit Year (Revised). (2022, July 19). CMS. https://www.cms.gov/cciio/programs-and-initiatives/premium-stabilization-programs/downloads/ra-report-by2021.pdf;* and *Summary Report on Permanent Risk Adjustment Transfer for the 2020 Benefit Year. (2021, June 30). CMS. https://www.cms.gov/cciio/programs-and-initiatives/premium-stabilization-programs/downloads/ra-report-by2020.pdf.*

[98] We recently reconducted this analysis. Also, see the Summary Report on Permanent Risk Adjustment Transfer for the 2022 Benefit Year at: *https://www.cms.gov/files/document/summary-report-permanent-risk-adjustment-transfers-2022-benefit-year.pdf.*

[99] Other examples of HHS policies to assist small issuers including exempting small issuers under 45 CFR 153.630(g)(1) and 45 CFR 153.630(g)(2) from being required to participate in risk adjustment data validation under certain circumstances.

[100] We note that, prior to the 2018 benefit year, HHS used 100 percent of Statewide average premium in the transfer formula but reduced it to 84 percent of Statewide average premium in order to account for administrative costs that do not vary with claims. See 81 FR 94099 through 94101.

[101] *Summary Report on Permanent Risk Adjustment Transfer for the 2022 Benefit Year. (2023, June 30). CMS. https://www.cms.gov/files/document/summary-report-permanent-risk-adjustment-transfers-2022-benefit-year.pdf.*

[102] See 45 CFR 156.1215.

recipient for special benefits derived from Federal activities beyond those received by the general public.[103] The HHS-operated risk adjustment program provides special benefits as defined in section 6(a)(1)(B) of OMB Circular No. A–25 to issuers of risk adjustment covered plans because it mitigates the financial instability associate with potential adverse risk selection.[104] The HHS-operated risk adjustment program also contributes to consumer confidence in the health insurance industry by helping to stabilize premiums across the individual, merged, and small group markets.

To calculate the HHS risk adjustment user fee, we divided HHS' projected total costs for administering the HHS risk adjustment program on behalf of States by the expected number of billable member months (BMM) in risk adjustment covered plans in States where the HHS-operated risk adjustment program will apply in the 2025 benefit year. We estimated that the total cost for HHS to operate the risk adjustment program on behalf of States for the 2025 benefit year will be approximately $66 million, which is more than the approximately $60 million estimated for the 2024 benefit year. We projected increased costs due to increased contracting costs combined with increased labor costs.

We also projected higher enrollment than our prior estimates in the 2024 and 2025 benefit years based on the increased enrollment, as measured by BMM, between the 2021 and 2022 benefit years in the individual non-catastrophic market risk pool in most States, likely due to the increased PTC subsidies provided for in the American Rescue Plan Act of 2021 (ARP).[105] [106] In light of the passage of the Inflation Reduction Act of 2022 (IRA), in which section 12001 extended the enhanced PTC subsidies in section 9661 of the ARP through the 2025 benefit year, we projected there will continue to be increased enrollment levels through the 2025 benefit year.[107] Because we projected an increased budget to operate the HHS-operated risk adjustment program and estimated higher enrollment through the end of the 2025 benefit year, we proposed a HHS risk adjustment user fee of $0.20 PMPM for the 2025 benefit year.

We sought comment on the proposed HHS risk adjustment user fee for the 2025 benefit year.

After reviewing public comments and revising our projections based on newly available data that impacted our enrollment projections, we are finalizing a risk adjustment user fee rate of $0.18 PMPM for the 2025 benefit year. We summarize and respond to public comments received on the proposed 2025 benefit year risk adjustment user fee rate below.

Comment: Some commenters supported lowering the risk adjustment user fee rate. Several commenters supported a risk adjustment user fee rate that adequately funds Federal programs.

Response: We are finalizing a risk adjustment user fee rate for benefit year 2025 of $0.18 PMPM. The final 2025 benefit year risk adjustment user fee rate is lower than the proposed 2025 benefit year user fee rate because we revised our enrollment projections based on newly available data from the 2024 benefit year individual market Open Enrollment (OE) period, which occurred between November 2023 and January 2024. In particular, the 2024 OE cycle saw larger than projected plan selections, which resulted in us increasing our projected BMMs for the risk adjustment user fee for the 2025 benefit year,[108] and with a projected budget of $66 million, it resulted in a lower risk adjustment user fee.

5. Audits and Compliance Reviews of Risk Adjustment Covered Plans (§ 153.620(c))

We proposed amending § 153.620(c)(4) to require issuers of risk adjustment covered plans to complete, implement, and provide to HHS written documentation of any corrective action plans when required by HHS if a high-cost risk pool audit results in the inclusion of certain observations [109] in the final audit report. Currently, under § 153.620(c)(4), a corrective action plan is only required, at HHS' direction, if the audit results in the inclusion of a finding in the final audit report. Upon completion of the first benefit year of high-cost risk pool audits (2018 benefit year audits), HHS found that some issuers of risk adjustment covered plans made data submission errors to their EDGE servers that constituted instances of noncompliance but did not result in a financial impact and were therefore recorded as observations in the final audit report. Under this proposal, HHS would communicate to the issuer, as part of the final audit report, which findings and observations require a corrective action plan.

Under this policy, consistent with the existing framework in § 153.620(c)(4), HHS would require an issuer of a risk adjustment covered plan to provide, within 45 calendar days of the issuance of the final audit report, a written corrective action plan for any audit findings, as well as audit observations when there is evidence of non-compliance with applicable Federal requirements, to HHS for approval, implement that plan, and provide to HHS written documentation of the corrective actions taken to resolve the root cause of the non-compliance identified.[110] We proposed to apply this change beginning with 2020 benefit year high-cost risk pool audits, which we anticipate beginning in 2024.[111]

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this amendment and the accompanying policies as proposed. We summarize and respond to public comments received on the proposed amendments to § 153.620(c)(4) to require a corrective action plan for audit observations under certain circumstances below.

Comment: Several commenters supported the proposal. One commenter agreed that allowing instances of non-compliance to be unaddressed could impact EDGE data integrity and that a corrective action plan is an effective tool to address this concern. Other commenters generally supported the proposed policy, noting that it allows HHS to run sufficiently and efficiently, and provide oversight of, its risk

[103] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.*

[104] Id.

[105] ARP. Public Law 117–2 (2021).

[106] CMS. (2023, June 30). Summary Report on Permanent Risk Adjustment Transfers for the 2022 Benefit Year. (p. 8). *https://www.cms.gov/files/document/summary-report-permanent-risk-adjustment-transfers-2022-benefit-year.pdf.*

[107] Inflation Reduction Act. Public Law 1217–169 (2022).

[108] For additional information, see *https://www.cms.gov/newsroom/fact-sheets/marketplace-2024-open-enrollment-period-report-final-national-snapshot.*

[109] In the context of high-cost risk pool audits, an ''observation'' results from the identification of areas for improvement when there is no evidence of actual non-compliance with applicable Federal requirements or when there may be evidence of non-compliance with applicable Federal requirements that does not require recoupment of these payments. Centers for Medicare & Medicaid Services, Center for Consumer Information and Insurance Oversight (CCIIO). (Dec. 2022). Best Practices Overview: Benefit Year (BY) 2018 HCRP Payment Audits and General EDGE Server Requirements. *https://regtap.cms.gov/reg_library_openfile.php?id=4234&type=l (Login Required).* This amendment and accompanying policies are limited to observations where there may be evidence of non-compliance with applicable Federal requirements.

[110] See 45 CFR 153.620(c)(4). Also see 86 FR 24192 through 24194.

[111] If 2020 benefit year high-cost risk pool audits begin in early 2024, we anticipate the final audit reports would be completed, with findings and observations identified, in early 2025.

adjustment program, which aligns with professional industry organizations' goals to support continuous improvement in their members' compliance with local, State, and Federal requirements and their own policies and procedures.

Other commenters opposed the proposal stating concerns that the changes to the audit would be applied retrospectively to observations that do not have monetary impacts. Other commenters were concerned about a perceived lack of rights and processes available for issuers to appeal audit findings or observations that require completion of corrective action plans. These commenters were concerned that there is not enough information regarding how HHS uses data collected during the audit processes. Commenters were also concerned that the use of corrective action plans in this manner would require issuers to provide data they do not readily have available in order to take the necessary corrective actions and that this access and use of data goes beyond what is necessary for the HHS-operated risk adjustment program. Commenters were also concerned that the timing of the amendments would not give issuers sufficient time to prepare and implement new processes. One commenter also raised concerns that the proposal lacked details on the audit process and asked that interested parties receive more information about the risk adjustment, specifically high-cost risk pool, audits.

Response: We are finalizing the proposal to require issuers to complete corrective action for certain risk adjustment audit observations as proposed. We agree with commenters that requiring the implementation of corrective action plans if a risk adjustment audit results in the inclusion of observations in the final audit report when there is evidence of non-compliance with applicable Federal requirements would help to ensure that HHS is able to efficiently run and provide oversight of its risk adjustment program.

As stated in the proposed rule, since enrollee-level data that HHS extracts from issuers' EDGE servers is also used for HHS risk adjustment model recalibration, updates to the AV methodology and calculator, and other analyses for the commercial individual and small group (including merged) market, and Federal HHS related programs (for example, Medicaid expansion, QHP population, and non-Federal governmental plans),[112] it is important that issuers of risk adjustment covered plans also take corrective action to address instances of non-compliance, which may have material impacts to the enrollee-level data, even if they did not result in a financial impact and were therefore recorded as observations in the final audit report.

We do not believe this change goes beyond the data uses and access necessary for the risk adjustment program, because the primary purpose of this policy is to strengthen the program integrity tools available to HHS when conducting risk adjustment audits to ensure the integrity of the data used for the HHS-operated risk adjustment program.[113] A major goal of requiring corrective action plans for observations where there is evidence of non-compliance with applicable Federal requirements is to ensure data use and integrity issues identified via audits are corrected timely; otherwise, these issues may have material impact on the enrollee-level EDGE data or data submission for future benefit years if they persist. We also note that this policy is not being retrospectively or retroactively applied. We are finalizing, as proposed, that this change will apply beginning with 2020 benefit year high-cost risk pool audits, which we anticipate beginning in 2024 with audit findings and observations being communicated to issuers in early 2025. Additionally, the requirements evaluated in the 2020 benefit year audits will reflect the standards that issuers were required to comply with at the time of the 2020 benefit year EDGE data submission deadline (April 30, 2021). Further, current audit processes use corrective action plans as a tool to provide evidence that an issuer has sufficiently remediated an error or instance of non-compliance identified through an audit finding. Amending the regulation to capture the ability for HHS to require a corrective action plan for certain audit observations where there is evidence of non-compliance with Federal requirements would help to enhance data and program integrity by ensuring that issuers remedy EDGE data submission issues identified through audit, including those that did not result in a financial impact, so identified issues do not persist and impact future data submission years. Consistent with current requirements for addressing late-filed discrepancies to address errors identified in EDGE data submission, if the issuer, after conducting an impact analysis of the data submission error that covers the period of non-compliance, identifies a potential overpayment resulting from the error, the issuer is required to report the overpayment to HHS as a prior benefit year discrepancy.[114]

We also do not believe that issuers would need to provide data that is not readily available. The audit process validates the accuracy of the data submitted by issuers of risk adjustment covered plans to their respective EDGE servers.[115] With data coming from the EDGE servers, issuers should not have to provide additional data beyond what is required for the audit process, which are the same data necessary to administer the HHS-operated risk adjustment program.

We understand concerns regarding time to implement new processes to properly respond to corrective action plans. As stated in the proposed rule, we proposed to amend the established audit process to require corrective action plans for certain audit observations identified through HHS risk adjustment (including high-cost risk pool) audits (88 FR 82510) and the process would align with the existing framework detailed in § 155.620(c)(4).[116] The only change to the existing framework is that HHS, at its discretion, may require a corrective action plan for certain audit observations identified through the risk adjustment audits where there is evidence of non-compliance with applicable Federal requirements. As previously stated, this amendment does not alter the requirements evaluated through the risk adjustment audit. For example, 2020 benefit year high-cost risk pool audits will evaluate issuer compliance with the 2020 benefit year data submission requirements for their respective 2020 benefit year EDGE data.[117] The amendment to § 155.620(c)(4) to also require corrective

[112] See, for example, 84 FR 17488 and 87 FR 27243.

[113] As previously noted, HHS uses data issuers submit to their EDGE servers to calculate transfers under the State payment transfer formula and the high-cost risk pool parameters, as well as for recalibration of the HHS risk adjustment models and for development of risk adjustment policies, among other permitted uses.

[114] *See* 86 FR 24195. Also see Distributed Data Collection (DDC) for Risk Adjustment (RA) Including High Cost Risk Pool (HCRP): EDGE Server Announcements webinar presentation slides from August 18, 2020 on ''EDGE/RA Discrepancy Reporting: Prior Benefit Year Discrepancy Web Form,'' available at *https://regtap.cms.gov/reg_librarye.php?prog=3&page=1&i=3357.*

[115] See CMS. (2023, September 06). 2018 Benefit Year (BY) High-Cost Risk Pool (HCRP) Audit Report. (p. 3). *https://www.cms.gov/files/document/2018-hcrp-audit-summary-publish-508.pdf.*

[116] See 45 CFR 153.620(c)(4).

[117] The deadline for issuers to submit 2020 benefit year data to their respective EDGE servers was April 30, 2021. See 45 CFR 153.730.

action plans for certain audit observations aligns with previously established regulations requiring corrective action plans for audit findings for risk adjustment audits. Issuers can find more information about corrective action plans and the general high-cost risk pool audit process by reviewing past audit reports [118] and high-cost risk pool audit summary reports.[119] An issuer selected for a high-cost risk pool audit will also have the opportunity to ask questions during the entrance conference [120] and throughout the audit process. Additionally, we will continue to communicate with issuers selected for audit throughout the audit process to ensure they understand the process and to respond to any questions if issuers are required to address findings or certain observations in final audit reports through a corrective action plan.

We understand concerns regarding rights to address or remedy issues during the audit process. Current audit procedures provide issuers with ample opportunities to raise issues or concerns with findings and observations to HHS before the issuance of the final audit report. For example, prior to issuing a final report, HHS shares its preliminary audit findings with issuers,[121] and issuers have the opportunity to dispute any findings or observations.[122] Additionally, if HHS and the issuer do not agree with the final audit report, both HHS's final audit report and the issuer's disagreement is publicly released. In short, the risk adjustment audits are collaborative and involve coordination with issuers to resolve data discrepancies and address any questions or concerns issuers may have throughout the audit process.[123] Further, not every observation will require a corrective action plan. If, during the audit process, an issuer proactively takes steps that HHS evaluates as sufficient to address an audit observation or finding for which HHS would have otherwise required a corrective action plan, HHS may elect to not require additional action after the final audit report is issued.

D. 45 CFR Part 155—Exchange Establishment Standards and Other Related Standards

1. Approval of a State Exchange (§ 155.105)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82551), we proposed to amend § 155.105(b) to require that, in addition to meeting all other approval standards under § 155.105(b), a State seeking to operate a State Exchange must first operate a State-based Exchange using the Federal platform (SBE–FP), meeting all requirements under § 155.200(f), for at least one plan year, including an open enrollment period. This proposal was intended to give States sufficient time to create, staff, and structure a State Exchange that could transition to operating its own platform and establish relationships with interested parties critical to a State Exchange's success in operating an Exchange, including standing up and operating a Navigator and consumer outreach program, assuming plan management responsibilities, and communicating effectively with consumers to support enrollment and avoid health care coverage gaps.

As stated in the proposed rule (88 FR 82511), over the past several years, we have observed the benefits of States first operating an SBE–FP for at least one plan year prior to transitioning fully from an FFE to a State Exchange. Operating an SBE–FP for at least one plan year, including its open enrollment period, prior to transitioning to a State Exchange gives States an opportunity to focus on investing time and resources needed to implement key Exchange functions that involve the establishment of critical and necessary relationships with consumers, consumer assisters, partners in the coordination of eligibility functions, issuers, and other interested parties. Operating an SBE–FP for at least one plan year prior to transitioning to a State Exchange also affords States time to implement eligibility and enrollment functions which require information technology platforms, call centers, and coordination with partners, such as State Medicaid agencies. In addition, operating an SBE–FP for at least one plan year prior to transitioning to a State Exchange gives States more time to engage with partners and interested parties to develop various consumer-facing content and consumer outreach strategies, all while establishing and gaining experience operating a consumer assistance program. Further, when States operate an SBE–FP for at least one plan year before operating a State Exchange, they are more likely to have the time and resources needed to coordinate with the State's Department of Insurance to establish policies and procedures associated with carrying out plan management functions, engage with the issuer community, and develop QHP certification requirements and processes. Finally, operating an SBE–FP for at least one plan year before transitioning to a State Exchange allows States time to familiarize consumers, consumer assisters, partners in the coordination of eligibility functions, issuers, and other interested parties with operations of the new State Exchange organization ahead of engaging with that Exchange, and it mitigates the risks and disruption associated with a transition to a State Exchange and simultaneous replacement of *HealthCare.gov* as the eligibility and enrollment pathway for those parties.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to require that a State seeking to operate a State Exchange must first operate an SBE–FP, meeting all requirements under § 155.200(f), for at least one plan year. We summarize and respond to public comments received on the proposed policy below.

Comment: A majority of the comments we received supported the proposal. Many commenters supported the policy, suggesting it would provide needed time to prepare and implement a successful Exchange, including establishing and testing technical operations, establishing relationships with QHP issuers and other government entities, and creating greater transparency and opportunities for public and interested party engagement with the process. Some commenters also suggested that the extended time for State Exchange establishment would protect consumers by ensuring network adequacy and that all functions for consumer support are in place before a State Exchange is launched, and that the additional time would help SBE–FPs refine their plans and processes before transitioning to a State Exchange model.

Response: We agree that the extended time afforded by this policy will help to ensure the success of newly-established State Exchanges.

Comment: A few commenters stated that several States have successfully implemented State Exchanges without these provisions. These commenters suggested that this may be an indication

[118] For additional information see CMS. (2023, December 2023). High-Cost Risk Pool (HCRP) Audits. *https://www.cms.gov/CCIIO/Resources/Forms-Reports-and-Other-Resources/Exams_Audits_Reviews_Issuer_Resources-#high-costriskpool.*

[119] For additional information see CMS. (2023, September 06). 2018 Benefit Year (BY) High-Cost Risk Pool (HCRP) Audit Summary. *https://www.cms.gov/files/document/2018-hcrp-audit-summary-publish-508.pdf.*

[120] See 45 CFR 153.620(c)(1)(i).

[121] See 45 CFR 153.620(c)(3).

[122] See 45 CFR 153.620(c)(3)(i)–(ii).

[123] See 2018 Benefit Year (BY) High-Cost Risk Pool (HCRP) Audit Summary. (p. 3).

that the proposed provisions are unnecessary, and that a State should be given flexibility to decide its path forward. They recommended that HHS only apply these new requirements to States that propose operating an Exchange in a way that differs significantly from the traditional model.

Response: Over the past several years, all States that have transitioned to a State Exchange have first operated an SBE–FP. Our experience in overseeing these transitions has made evident the advantage a State has in operating an SBE–FP prior to transitioning to a State Exchange. Notably, operating an SBE–FP first provides States an opportunity to implement certain significant Exchange functions that are needed for State Exchange operations, such as operating the State's Navigator program and developing plan management capabilities. The interim period operating an SBE–FP will provide States with sufficient time to continue developing resources and establishing strong relationships with interested parties, which are both critical for implementing key State Exchange functions. We have particularly observed this in regard to developing eligibility and enrollment functions, including implementing and operating information technology platforms, call centers, and coordination with the State Medicaid agency and other partners.

Furthermore, based on our work with SBE–FPs that have transitioned to State Exchanges over the past several years, we have learned the importance of having an established consumer assistance and outreach program as an SBE–FP prior to the implementation of a State Exchange. State Exchanges that previously operated an SBE–FP have stated that this experience, as well as an SBE–FP's developed communication line with consumers, helps mitigate potential disruption to consumer enrollment when *HealthCare.gov* is no longer the eligibility and enrollment pathway for the State Exchange's consumers, and in turn, the State Exchange takes on this role.

Given these benefits, we believe that implementing a regulatory requirement that States must first operate an SBE–FP for at least one plan year prior to transitioning to a State Exchange will benefit both the State's implementation of a State Exchange, as well as the Exchange's long-term success.

Comment: A few commenters stated that these new rules could introduce delays in the process for a State to establish a State Exchange. Some of these commenters expressed concern that these delays could prevent a State from transitioning to a State Exchange due to increased costs in meeting requirements. One commenter stated that a longer establishment period could impede a State from standing up its own Exchange because the initial implementation of an SBE–FP and then a subsequent State Exchange might occur over election periods, and there would be a risk that new State executive or legislative leadership might decide to no longer pursue the transition to a State Exchange during a State's SBE–FP status.

Response: We recognize that a State's implementation of a State Exchange may depend on the State's specific needs and the decisions of its elected officials. We also understand that a State could decide for various reasons to stop pursuing or operating a State Exchange. However, we are of the view that requiring a State Exchange to first operate an SBE–FP is appropriate because a State's elected officials have always had the ability to change the State's plans to become or remain a State Exchange, and therefore that fact alone should not hinder adoption of the proposed policy that aims to ensure the success of State Exchanges.

Comment: One commenter expressed concern that delays in transitioning to a State Exchange would result in the State receiving less user fee revenue, and that the need to pay or remit user fees to CMS as an SBE–FP could result in a State ultimately not being able to establish a State Exchange.

Response: Our experience has shown that SBE–FPs that have transitioned to State Exchanges are able to fund these activities, at least in part, with additional user fees that a SBE–FP may charge issuers on top of the Federal Platform user fee. Section 1311(d)(5)(A) of the ACA permits an Exchange to charge user fees on participating health insurance issuers as a means of generating funding to support its operations.[124] Under § 156.50(c), a participating issuer offering a plan through a SBE–FP must remit a user fee to HHS each month that is equal to the product of the SBE–FP user fee rate specified in the annual HHS Notice of Benefit and Payment Parameters for the applicable benefit year and the monthly premium charged by the issuer for each policy where enrollment is through the SBE–FP. SBE–FPs may also assess an additional State-level user fee, beyond the Federal Platform user fee, on issuers for the purposes of operating their SBE–FP, which could theoretically amount to the total user fee a State would assess issuers as a State Exchange. In our experience, SBE–FPs have utilized additional State-level user fees assessed on issuers to support a State's eventual State Exchange implementation.

Comment: One commenter stated that because the ACA directs States to establish an Exchange, this proposal oversteps the authority granted to HHS by the ACA, as it could prevent a State that felt it was prepared to take on the responsibilities of operating a State Exchange from doing so.

Response: We seek to support States in successfully implementing State Exchanges. Section 1321 of the ACA directs HHS to issue regulations setting standards for establishing and operating an Exchange, which it implemented at § 155.105. States may subsequently elect to establish and operate Exchanges, as prescribed by HHS and per the requirements of § 155.105, which requires HHS to approve a State Exchange only if it is able to meet other required functions of an Exchange. All States considering transitioning to a State Exchange must consider if they are able to meet these requirements. As we stated above, our experience is that first operating an SBE–FP is necessary for successfully implementing and operating a State Exchange. Therefore, HHS is using the authority granted to it in section 1321 of the ACA to include in § 155.105 the requirement for a State transitioning to operate a State Exchange to first operate an SBE–FP for one plan year.

Comment: One commenter suggested that CMS modify this proposal so that States with demonstrated capabilities in technology planning and Exchange management could be granted the flexibility to transition directly to a State Exchange if they meet certain readiness criteria.

Response: Regardless of a State's ability to meet any readiness criteria we might set from a technological perspective, there are other factors, including establishing relationships with other State agencies and programs, that make this technological readiness not sufficient on its own to bypass the 1-year-SBE–FP requirement. We agree that a key component of a State's readiness to implement and operate a State Exchange is being ready to implement an eligibility platform to support key State Exchange functions, including the display and selection of QHPs and the processing of eligibility applications and determinations for Exchange enrollment and insurance affordability programs. However, we believe that a State that met any technology requirements that we set

[124] If a State does not elect to operate an Exchange or does not have an approved Exchange, section 1321(c)(1) of the ACA directs HHS to operate an Exchange within the State.

would still need to demonstrate the non-technology capabilities and functions required of a State Exchange, gained from experience, operating an SBE–FP that we discuss above. For example, State Exchanges need to coordinate sharing of plan information and plan management work with issuers, plan and provide training to Navigators and Assisters, and plan and implement consumer outreach activities, such as drafting notices, providing training to call center and other staff on relevant policies and procedures, and writing and updating website and other consumer-facing materials.

Often, States that are transitioning from an FFE to operating a State Exchange draw on the work of contracted vendors and companies that have assisted with other States' Exchange transitions in developing that State's eligibility and enrollment platform or website. It is possible that a State might indicate that it would be technologically ready to transition directly to operating a State Exchange, without first operating an SBE–FP, due to its decision to contract with vendors and companies, who would apply the same or similar plans for development and implementation of its eligibility and enrollment platform. However, it is not possible for a State seeking to newly establish a State Exchange to identically apply development and implementation plans and other resources utilized for an eligibility platform in already-established State Exchanges, because in our experience those Exchanges may operate with partner State agencies and programs, such as Medicaid and CHIP, differently from the State that is seeking to newly establish a State Exchange. As Insurance Affordability Programs may require State-specific programming for an eligibility platform to make a correct eligibility determination, or for appropriate information to be displayed on consumer-facing resources, a State's readiness to operate an eligibility platform requires consideration and work on other elements than prior demonstrated capabilities in technology planning and Exchange management. Additionally, some States may pursue an integrated eligibility system between the State Exchange and the State Medicaid agency in which the State Exchange's eligibility system can determine eligibility for non-MAGI Medicaid, as well as other State programs, while other States may have different eligibility determination agreements between the State Exchange and the State Medicaid agency.

As a result, we believe that the experience gained from first operating an SBE–FP and providing additional time for interoperability with other State programs and establishing relationships with consumers and advocates makes it necessary to first operate an SBE–FP before operating a State Exchange.

Comment: One commenter stated that although experience gained operating an SBE–FP for States transitioning from the FFE to a State Exchange would be valuable, the options for plan management activities provided to States operating State Exchanges are more flexible than the options provided to States operating an SBE–FP. They also stated that relationships with interested parties may also change when operating an SBE–FP and later operating a State Exchange, due to the difference in responsibilities and authorities granted to SBE–FPs and those granted to State Exchanges. They expressed concern that the need to attend to these differences in responsibilities and flexibilities could strain the resources of smaller States whose ultimate goal is to establish a State Exchange rather than an SBE–FP.

Response: While we agree that some plan management responsibilities differ for a State Exchange and an SBE–FP, the differences are relatively minor and therefore the experience operating an SBE–FP can generally be applied to the responsibilities of State Exchanges. As an example, both State Exchanges and SBE–FPs have the legal authority and responsibility to establish QHP certification processes with issuers, review QHP applications, and make QHP certification decisions, including the responsibility for coordinating with their participating QHP issuers on plan data corrections. Given the similarity between State Exchange and SBE–FP plan management activities, as well the significant resources and planning required for an SBE–FP to conduct plan management activities, we believe that implementing a SBE–FP before implementing a State Exchange will allow a State to demonstrate its capacity to manage and implement this key Exchange functionality.

2. Election To Operate an Exchange After 2014 (§ 155.106)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82551), we proposed changes to the Exchange Blueprint (OMB control number: 0938–1172) requirements for States seeking to operate a State Exchange. We proposed to revise § 155.106(a)(2) to add a requirement that a State, as part of its activities for its establishment of a State Exchange, provide upon request, supplemental documentation to HHS detailing the State's implementation of its State Exchange functionality. Such supporting documentation would inform HHS's decision to approve or conditionally approve a State Exchange and could include, for example, materials demonstrating progress toward meeting State Exchange Blueprint requirements, documentation that details a State's plans to implement and meet the Exchange functional requirements as laid out in the State Exchange Blueprint, or plans to engage in consumer assistance programs and activities. In the proposed rule (88 FR 82552) we noted, we would provide guidance and direction to each State with our requests for supplementary information so that each State understands the purpose of the requests and how the requested information would help us determine whether the State meets the functional requirements for operating a State Exchange. Because the ability to request additional detail on a State's Exchange implementation plans is crucial for identifying risk areas for a State Exchange's operations, it is essential to determining that a State Exchange is ready to operate. The current State Exchange Blueprint application provides that we may require live demonstrations of Exchange functionality on the State Exchange's platform, as well as supporting documentation, as evidence of the State's progress toward meeting State Exchange Blueprint application requirements. In order to set clear expectations, we proposed to codify that as part of the State's submission of a State Exchange Blueprint application, HHS has the authority to request any evidence HHS determines necessary for the State to detail its implementation of the required State Exchange functionality. This could include HHS requiring a State to submit detailed plans regarding its State Exchange consumer assistance programs and activities, such as information on its direct outreach plans. In the proposed rule we noted, we would request supporting documentation from States with the goal of imposing minimal burden on a State's ability to meet its State Exchange Blueprint requirements, while maintaining the objective of gathering sufficient information to assess a State's readiness to operate a State Exchange and ensure that a State is sufficiently implementing and scaling policies, procedures, operations, technology, and administrative capacities to meet the needs of the State's consumers. We would use the information in a State's State Exchange Blueprint application, as well as any

supporting documentation and evidence, to make a determination of whether to grant approval for a State's establishment and operation of a State Exchange for its intended first open enrollment period.

We also proposed to add new § 155.106(a)(2)(i) and (ii) to require that when a State submits its State Exchange Blueprint application to HHS for approval, the State must provide the public with notice and a copy of its State Exchange Blueprint application along with certain other information. We stated that, to facilitate such public notice, HHS would post a State Exchange Blueprint application, submitted by a State to its public-facing website within 90 calendar days of receipt. Further, we proposed to require that at some point following a State's submission of its State Exchange Blueprint application to HHS and before HHS's approval or conditional approval of the State Exchange Blueprint application, a State must conduct at least one public engagement event (such as a townhall meeting or public hearing) in a timeline and manner (for instance, considering whether to conduct in-person and/or virtually) considered effective by the State, with concurrence from HHS, at which interested parties can learn about the State's intent to establish a State Exchange and the State's progress toward executing that transition. We also proposed to require that while a State is in the process of establishing a State Exchange and until HHS has approved or conditionally approved the State Exchange Blueprint application, a State must conduct periodic public engagements at which interested parties would continue to learn about the State's progress towards establishing a State Exchange, in a timeline and manner considered effective by the State with concurrence from HHS. We are finalizing these provisions as proposed. However, based on comments we received, we now plan to publicly post the State's Blueprint application within 30 days of receipt.

The Exchange Blueprint serves as a vehicle for a State to document its progress toward implementing its intended Exchange operational model. The submission and approval of Exchange Blueprints is an iterative process that generally takes place over the course of 15 months prior to a State's first open enrollment operating a State Exchange. Further, the establishment of a State Exchange involves significant collaboration between HHS and States to develop plans and document readiness for the State to transition from an Exchange that uses the Federal platform to one that operates its own eligibility and enrollment platform. State activities as part of this transition process include completing key milestones, meeting established deadlines, and implementing contingency measures. We believe that a mandatory process whereby States notify the public of their plans to establish State Exchanges and provide an opportunity to meet with interested parties to provide updates helps ensure that interested parties are aware these activities are occurring and can provide input on how States can successfully establish State Exchanges.

As stated in the proposed rule (88 FR 82553), a primary goal of these proposals is to strengthen the transparency requirements of the State Exchange Blueprint review and approval process. Based on our experience supporting and providing oversight to States in their establishment of State Exchanges, we believe that all States establishing Exchanges would benefit from having a more transparent process to facilitate input from interested parties, including consumers and issuers. A more transparent process would provide opportunities for consumers to learn more about a State's establishment process and plans, which can build consumer trust and help support a State's enrollment goals. States planning to establish State Exchanges could use public events like town halls or hearings to meet these transparency requirements.

We further note that compliance with these transparency requirements could help States that establish State Exchanges meet the consultation requirements with interested parties under § 155.130. Section 155.130 requires an Exchange to regularly consult on an ongoing basis with a list of eleven stakeholder groups, including educated health care consumers who are QHP enrollees and, if applicable, Federally recognized Tribes, as defined in the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a. For example, during a State's establishment of its Exchange, the State and these interested parties could formalize a process under which they would continue to confer as required by § 155.130.

We sought comment on this proposal, including comments related to additional ways States seeking to establish State Exchanges could provide greater transparency to interested parties, including consumers, regarding the process for establishing State Exchanges. After consideration of the comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing as proposed the amendment to § 155.106(a)(2) to require as part of a State's activities for its establishment of a State Exchange, the State provide, upon request, supplemental documentation to HHS detailing the State's implementation of its State Exchange functionality. Such supplemental documentation may, for example, demonstrate progress toward meeting State Exchange Blueprint requirements, or detail a State's plans for how it intends to implement and meet the Exchange functional requirements as laid out in the State Exchange Blueprint.

We also finalize as proposed new paragraph § 155.106(a)(2)(i) which states that, upon submitting an Exchange Blueprint application to operate a State Exchange, the State shall issue a public notice of its Exchange Blueprint application submission through its website and include a copy of the Exchange Blueprint application, a description of the Plan Year for which the State seeks to transition to a State Exchange, language indicating that the State is seeking approval from HHS to transition to a State Exchange, and information about when and where the State will conduct public engagements regarding the State's Exchange Blueprint application. To facilitate public notice, HHS will post a State Exchange Blueprint application submitted by a State to its public-facing website within 90 calendar days of receipt.

Finally, we finalize as proposed new paragraph § 155.106(a)(2)(ii) to require that at some point following a State's submission of its State Exchange Blueprint application to HHS and before HHS approves or conditionally approves the State's Exchange Blueprint application, a State must conduct at least one public engagement event (such as a townhall meeting or public hearing) in a timeline and manner (for instance, considering whether to conduct in-person and/or virtually) considered effective by the State, with concurrence from HHS, at which interested parties can learn about the State's intent to establish a State Exchange and the State's progress toward executing that transition.

After consideration of the comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these requirements with a modification to clarify that the State must submit supplemental information to HHS, upon request, detailing the State's implementation of its State Exchange functionality, including information on the ability to implement and comply

with Federal requirements for operating an Exchange. This information will assist in CMS determining whether the State meets the functional requirements for operating a State Exchange. We summarize and respond to public comments received on these proposals below.

Comment: Most commenters broadly supported the proposals associated with a State's election to operate a State Exchange, as it relates to both the requirements for a State to submit supporting documentation to HHS detailing the State's implementation of its State Exchange functionality, and, to provide the public with notice and a copy of its State Exchange Blueprint application and engage in periodic public hearings when a State submits its State Exchange Blueprint application to HHS for approval.

These commenters generally believed that the proposals would help States better implement and operate a State Exchange, provide transparency to States' interested parties, and improve consumer protections. One commenter stated that the resulting transparency may help interested parties become better aware of a State's transition plans and may submit helpful feedback to States, which States could consider in their transition planning.

Response: We appreciate and agree with these comments, many of which summarized or elaborated on the benefits that we described in the proposed rule.

Comment: A few commenters stated that the proposed provisions are arbitrary because all States that have transitioned to a State Exchange in the past several years have done so without the requirement for States to submit additional information or documentation on its State Exchange implementation progress or plans. One of these commenters requested that CMS provide a definitive list of additional documentation it may require from States, as well as stated that the request for additional information may impose additional burden, in terms of time and resources, on a State. Another commenter opposed these proposals more generally.

Response: HHS's collection of additional information and documentation demonstrating an Exchange's operational readiness is logically related to setting standards for establishing a State Exchange; thus these provisions are not arbitrary.[125] Regarding information we may require of States seeking to establish an Exchange, we anticipate requesting additional documentation that demonstrates a State's ability to successfully operate a State Exchange, including documentation that demonstrates progress toward implementing a State Exchange. Moreover, we disagree that States that have previously established a State Exchange did not submit such documentation. The current State Exchange Blueprint application already includes requests for supporting documentation that a State is progressing toward meeting State Exchange Blueprint application requirements. Therefore, this provision codifies existing policy, which existing State Exchanges have complied with. We believe these regulations will underscore to States the importance of submitting supporting information that we request, which we have regularly pursued with all States that have transitioned to State Exchanges over the past several years.

Comment: One commenter stated that although they saw the benefit in our proposal to require that at some point following a State's submission of its State Exchange Blueprint application to HHS a State must conduct at least one public engagement, they did not agree with such public engagements taking place every 3 months. The commenter noted that conducting public engagements every 3 months could be too burdensome on a State, which would delay a State in its State Exchange implementation plans. This commenter requested additional detail on the significance of this proposal.

Response: We proposed that following a State's submission of its State Exchange Blueprint application to HHS, a State must conduct at least one public engagement (such as a townhall meeting or public hearing) in a timeline and manner (for instance, considering whether to conduct in-person and/or virtually) considered effective by the State. Additionally, we proposed that during a State's process of establishing a State Exchange, and until HHS has approved or conditionally approved the State Exchange Blueprint application, it must periodically conduct additional public engagements. We did not prescribe how often these public engagements must occur, and we encourage States to hold them as frequently as would be beneficial to its State Exchange planning and to keeping its interested parties informed.

We believe any potential burden on States from conducting regular public engagement is outweighed by the benefit to interested parties, such as consumers and advocate groups, in having the opportunity to learn about, and provide input on, a State's Exchange implementation plans, which the State may utilize in developing its State Exchange implementation plans.

Comment: One commenter suggested that CMS require States to request feedback on its Blueprint application during the public engagements from a set group of interested parties which would include agents, brokers, and EDE entities.

Response: We encourage States that are establishing a State Exchange to utilize the public engagement provisions as a pathway to fulfilling its stakeholder consultation requirements under § 155.130, which requires a State Exchange to regularly conduct stakeholder consultations with certain entities, including agents and brokers. In meeting the public engagement policies being finalized in this rule, we encourage States to seek feedback from these particular groups as specified in § 155.130, as well as other groups, such as EDE entities, so that the State's efforts can translate into its required stakeholder consultation requirements under § 155.130.

Comment: One commenter stated that they supported the proposal, but urged CMS to ensure that it provides States with sufficient resources to facilitate a transitioning State's demands.

Response: We have established a robust program to support States that seek to establish a State Exchange and to ensure that the transition of consumers from the Federal platform to the State Exchange is as seamless as possible. This includes having dedicated teams to support States in establishing a State Exchange, well defined processes for assessing a State Exchange's operational readiness and transitioning of the State's consumers and Exchange functions off the Federal platform, and a technical assistance program to ensure State Exchange functions meet Federal requirements. We also have the ability to adjust the support we provide to respond to State-specific needs during a State's process for establishing a State Exchange. We will continue to consider these needs when supporting any State that decides to establish a State Exchange in the future.

Comment: One commenter stated that the proposed regulations do not address consequences if a State fails to meet Federal standards after implementing a State Exchange, and suggested that we delineate corrective action plans, civil monetary penalties, or other actions that would be taken if a State Exchange fails to meet Federal standards.

Response: We utilize specific oversight processes and tools (for

[125] *See* section 1321 of ACA.

example, the State-based Marketplace Annual Reporting Tool, along with independent external programmatic and financial audits), under the authority at § 155.1200, to assess State Exchange compliance with Federal rules on an ongoing basis. This process generally involves working with States to ensure that they are able to respond to, and take corrective action on, any identified deficiencies before civil monetary penalties are assessed or other enforcement actions are taken. Under section 1313(a)(4) of the ACA, if HHS determines that an Exchange has engaged in serious misconduct with respect to compliance with Exchange requirements, it has the option to rescind up to 1 percent of payments due to a State under any program administered by HHS until such misconduct is resolved. We will also consider the development of new guidance in the future to enhance transparency of Exchange operations and compliance by State Exchanges with Federal requirements.

Comment: A few commenters suggested that we require States that are establishing a State Exchange to provide a formal notice and comment period to the public after a State's Blueprint application is publicly posted. One commenter suggested that HHS publicly post a State's Blueprint application within 30 days of receipt, instead of the 90-day period mentioned in our proposal for this rule.

Response: We appreciate the suggestion to consider requiring that States provide a formal notice and comment period to the public after their Blueprint application is posted. At this time, we believe that the new requirement at § 155.106(a)(2)(ii) requiring a State to conduct at least one public engagement at which interested parties can learn about the State's intent to establish a State Exchange and the State's progress toward executing that transition, provides sufficient notice and ability for interested parties to comment. We will consider this suggestion for future rulemaking if we observe that the new requirement results in States being unable to obtain feedback from interested parties on a State's transition. Additionally, we appreciate the suggestion that HHS publicly post a State's Blueprint application within 30 days of receipt, instead of the 90-day period mentioned in our proposal for this rule, and we agree that publicly posting the application within this timeframe would benefit the public by providing more time and opportunities for interested parties to provide comments to us and the State. Accordingly, we intend to publicly post a State's Blueprint application within 30 days upon receipt by HHS. HHS would only post a State's initial Blueprint application,

Comment: One commenter suggested that we require States, as part of their Blueprint application, to submit documentation providing enrollment targets and plans to reduce the uninsured population and improve coverage in the initial years following the establishment of their State Exchange. Another commenter suggested that we require States to demonstrate clear metrics towards meeting their Blueprint goals on a periodic basis, after completing the Blueprint approval process.

Response: We appreciate the suggestions from these commenters. We will consider the development of new tools in future rulemaking that would enhance transparency into the performance of Exchanges, both for States newly transitioning to a State Exchange and for existing State Exchanges.

3. Additional Required Benefits (§ 155.170)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82553), we proposed to amend § 155.170(a)(2) to provide that a covered benefit in a State's EHB-benchmark plan would be considered an EHB. We are finalizing this policy as proposed, except for minor grammatical changes to improve clarity.

Under this policy, there will be no obligation for the State to defray the cost of a State mandate enacted after December 31, 2011, that requires coverage of a benefit covered in the State's EHB-benchmark plan. Benefits that are covered in a State's EHB-benchmark plan would not be considered in addition to EHB and would remain subject to the various rules applicable to the EHBs, including the prohibition on discrimination in accordance with § 156.125, limitations on cost sharing in accordance with § 156.130, and restrictions on annual or lifetime dollar limits in accordance with § 147.126.

Section 1311(d)(3)(B) of the ACA permits a State to require QHPs offered in the State to cover benefits in addition to EHB, but requires the State to make payments, either to the individual enrollee or to the issuer on behalf of the enrollee, to defray the cost of these additional State-required benefits.

Under longstanding policy, benefits mandated after December 31, 2011, other than for compliance with Federal requirements, are considered in addition to EHB (and thus not EHB) without regard as to whether the mandated benefits are embedded in the State's EHB-benchmark plan. Specifically, under § 155.170, a State mandate is considered 'in addition to EHB' if it: is the result of State action taken after December 31, 2011; [126] requires coverage of benefits specific to care, treatment, and services; [127] requires QHPs to cover the benefits; [128] and was not enacted to comply with Federal requirements. As a result, States must defray the associated costs of QHP coverage of such benefits, and those costs may not be included in the percentage of premium attributable to coverage of EHB for purpose of calculating APTC. In addition, because the benefits are not EHB, they are not subject to EHB nondiscrimination rules at § 156.125, the annual limitation on cost sharing at § 156.130, and restrictions on annual or lifetime dollar limits at § 147.126.

In the years since we finalized § 155.170, we received feedback from States and other interested parties, including in comments submitted to the EHB RFI (87 FR 74097) that we issued in 2022, that we should reconsider this provision. This feedback indicated that States struggle to understand and operationalize § 155.170, and that States that seek to mandate coverage of benefits are unintentionally removing EHB protections from benefits already included in the State's EHB-benchmark plan.

We believe that finalizing the proposal will promote consumer protections and facilitate compliance with the defrayal requirement by making the identification of benefits in addition to EHB more intuitive.

Under the policy, if a State mandates coverage of a benefit that is in its EHB-benchmark plan, the benefit will continue to be considered EHB and the State will not have to defray the costs of that mandate. However, if at a future date the State updates its EHB-benchmark plan under § 156.111 and removes the mandated benefit from its EHB-benchmark plan, the State may have to defray the costs of the benefit

[126] EHB Rule (78 FR 12838). A State action can be by statute, regulation, guidance, or other State action. 2017 Payment Notice (81 FR 12242).

[127] Requirements related to provider types, cost sharing, benefit delivery methods, or reimbursement methods are not specific to care, treatment, and services. EHB Rule (78 FR 12838).

[128] If a State action applies to the individual and small group markets, it applies to QHPs; if a State allows for the sale of large group plans as QHPs, a State-mandated benefit for the large group market applies to QHPs. EHB Proposed Rule (77 FR 70647 through 70648) (finalized without modification in the EHB Rule (78 FR 12838)).

under the factors set forth at § 155.170 as it will no longer be an EHB after its removal from the EHB-benchmark plan. In addition, starting in PY 2025, a State that is defraying the costs of a benefit required by a mandate that is in addition to EHB under § 155.170 will be permitted to cease defraying the costs of that benefit if the benefit is included in its EHB-benchmark plan or upon updating its EHB-benchmark plan in the future to include such benefit coverage.

As stated in the proposed rule (88 FR 82553), we acknowledge that there are States that may have been defraying the costs of benefits under the current policy that will be able to stop defraying those costs since we are finalizing this policy. We proposed this change to be effective starting with plan years beginning on or after January 1, 2025, to allow for issuers to make necessary modifications to their plan designs and plan filings to reflect any possible changes in designation of benefits as EHB as a result of this policy. For example, under this policy, if a State ceases defraying the costs of a State-mandated benefit to issuers because it is covered in its EHB-benchmark plan, issuers will update their plan filings accordingly beginning in PY 2025 to reflect that the benefit is covered as an EHB and will be included in the percentage of premium attributable to coverage of EHB for the purpose of calculating APTC. We also noted that those States will not be able to recoup the cost of benefits they have already defrayed. In addition, we acknowledge that the start and end dates of State legislative sessions vary greatly by State, and that this policy may occur during State legislative sessions that are considering State actions that will be impacted by the change.

We noted that this policy may impact health plans that are not directly subject to the EHB requirements, such as self-insured group health plans and fully-insured group health plans in the large group market that are required to comply with the annual limitation on cost sharing and restrictions on annual or lifetime dollar limits in accordance with applicable regulations with respect to such EHBs.[129] Such plans will be affected by this policy only to the extent that a State changes benefits in its EHB-benchmark plan and such plan selects that State's EHB-benchmark plan for purposes of defining EHBs covered by the plan that are subject to the annual limitation on cost sharing and prohibition on lifetime and annual dollar limits under sections 2707 and 2711 of the PHS Act, respectively. It may also impact a Basic Health Program (BHP) established under section 1331 of the ACA and Medicaid Alternative Benefit Plans (ABPs) implemented pursuant to section 1937 of the Act.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed with minor grammatical changes to improve clarity. We summarize and respond to public comments received on the proposed defrayal policy below.

Comment: Most commenters supported the proposed updates to our EHB mandate defrayal policy. Commenters cited myriad concerns with current mandate defrayal policy that would be alleviated by the proposal.

State regulators and advocacy groups stated that there has been confusion around operationalizing existing Federal requirements for the defrayal of State-mandated benefits. Commenters asserted that this policy change would alleviate an apparent inconsistency between §§ 155.170 and 156.111 under which a benefit could be ''essential'' for purposes of a State's EHB-benchmark plan selected by each State under § 156.111, but ''not essential'' for purposes of the defrayal requirement under § 155.170. Many commenters noted that the confusion related to defrayal under current policy was deterring States from addressing benefit coverage in their States through mandates.

A few commenters noted that, currently, it is a costly and time-intensive process for States to conduct mandate reviews to determine whether a new benefit would be subject to defrayal. They noted that because the proposal ultimately would make it easier to understand what benefits are EHB, it will help State regulators ensure that patients and consumers receive the protections that attach to EHB and facilitate decision-making by State policymakers seeking to ensure a robust benefit package for Exchange consumers. Many commenters supported the proposal to ensure that EHB maintain their protections, regardless of whether a State mandates it.

Many commenters noted the clarity from the proposed change will allow States to be more responsive to the needs of their States and specifically help advance health equity, mitigate health disparities, and improve access for those with disabilities and chronic conditions. A commenter noted that EHBs retaining protections, such as nondiscrimination rules, limitations on cost sharing, and restrictions on annual or lifetime dollar limits, is crucial for patients, particularly those with chronic conditions or complex health care needs, as it ensures access to essential health services with less financial burden.

Response: We understand that whether a State mandate will require defrayal is an important consideration for State policymakers. We agree with commenters that amending § 155.170(a)(2) to provide that a covered benefit in a State's EHB-benchmark plan is considered an EHB will make it easier for State policymakers to make defrayal determinations because it will be clearer that benefits in an EHB-benchmark plan do not require defrayal. We also anticipate that this change will help States and legislatures to understand the consequences of mandating benefits better and make it simpler overall for States to address health equity concerns in their States through mandates and EHB-benchmark plan updates.

Comment: State Departments of Insurance noted that the date-based cutoff for State-mandated benefit defrayal under § 155.170(a)(2)—under which a benefit that is required by State action taking place on or after January 1, 2012, is not EHB—inhibits State innovation in QHP benefit design. A comment from one State's Department of Insurance noted that, from the perspective of a legislator, the current defrayal rules can be perceived as an impediment to updating coverage to reflect new developments in health care delivery. One commenter stated that the current mandate defrayal policy discourages certain States from passing life-saving cancer-related mandates because of the cost or complications in implementing defrayal. Another commenter noted that several initiatives to expand mandated benefits in its State have either been unsuccessful or were delayed due to the possibility of a mandate defrayal.

Response: These comments are consistent with feedback we have received about this provision prior to this rulemaking. In the years since we finalized § 155.170, we have received feedback from States and other interested parties that we should reconsider the policy, including in comments submitted to the EHB RFI (87 FR 74097) that we issued in 2022. Many commenters to the EHB RFI specifically recommended repealing or modifying § 155.170(a)(2) to define benefits in a State's EHB-benchmark plan as not ''in addition to EHB.'' In our experience, States often are unsure whether they are

[129] See parallel requirements to § 147.126 at 26 CFR 54.9815–2711, and 29 CFR 2590.715–2711. Additionally, section 2707(b) of the PHS Act, as added by the ACA, was adopted by reference into section 9815 of the Code and section 715 of the Employee Retirement Income Security Act (ERISA).

making correct defrayal determinations due to the complexity of the current policy. Throughout the years of providing technical assistance to States analyzing whether mandates require defrayal, one of the most common areas of confusion has been an apparent inconsistency between Sections §§ 155.170 and 156.111, regarding whether a benefit can be ''essential'' for purposes of the Federally required EHB-benchmark plan selected by each State, but not be an EHB for the purposes of defrayal. We agree with commenters that States have struggled to understand and operationalize the requirements under current mandate defrayal policy and that the amendments we propose to § 155.170 will resolve such confusion. Therefore, we are finalizing the proposal to amend § 155.170(a)(2) to provide that a covered benefit in a State's EHB-benchmark plan is considered an EHB. We believe this amendment will facilitate compliance with the defrayal requirement by making the identification of benefits in addition to EHB more intuitive.

Comment: Many commenters expressed concern that some State efforts to mandate certain benefits could unintentionally result in removing EHB protections from benefits already included in the State's EHB-benchmark plan. Several commenters noted that the current policy has created unnecessary uncertainty related to EHB protections and financial barriers for people enrolled in EHB coverage.

Response: The finalization of this policy will preserve EHB protections for benefits in a State's EHB-benchmark plan, and there would be no obligation for States to defray the cost of any State mandate enacted after December 31, 2011 that requires coverage of a benefit covered under a State's EHB-benchmark plan. Benefits that are covered in a State's EHB-benchmark plan will be subject to the various rules applicable to EHB, including the prohibition on discrimination in accordance with § 156.125, limitations on cost sharing in accordance with § 156.130, and restrictions on annual or lifetime dollar limits in accordance with § 147.126.

Comment: Several commenters that opposed the proposal asserted that permitting States to deem a benefit EHB by reference to its inclusion in an EHB-benchmark plan contradicts the statutory intent of the ACA's EHB framework, which the commenters asserted intended a comprehensive assessment of typicality among commercial coverage amidst a series of clear statutory guardrails. A commenter asserted that section 1302 of the ACA authorizes HHS to define EHB, but noted that it does not allow it to do so in a manner that elevates State EHB-benchmark plans to a place of prominence not envisioned by the statute. A commenter urged CMS to be cautious of interpreting what constitutes an EHB too broadly and suggested that the definition of ''essential'' health benefits should remain focused on a set of benefits that follow the categories established in the ACA and should be representative of benefits offered in a ''typical employer plan,'' as required under the statute.

A few commenters that opposed the proposal suggested that it would permit States to avoid defraying the cost of any additional benefit so long as they updated their EHB-benchmark plans, effectively nullifies the cost defrayal obligation, and cannot be squared with the statute's requirements. Those commenters asserted that Congress struck a careful balance in section 1311(d)(3)(B) of the ACA; it afforded States the authority to mandate additional benefits but required them to defray costs when doing so.

Commenters who supported the proposal noted that the proposal is more consistent with the plain language and intent of section 1311(d)(3)(B) of the ACA which requires States to defray the cost of benefits that are ''in addition to the essential health benefits'' than the existing requirements related to defrayal. One commenter noted the proposal will benefit consumers by ensuring that QHPs include the full range of benefits commonly included in typical employer plans in a State, consistent with the intent of the ACA's EHB provision. A few commenters noted that limiting EHB-benchmark benefits that do not require defrayal only to those enacted on or before December 31, 2011, was arbitrary and limits the ability of States to ensure plans meet the current needs of consumers. Another commenter noted that requiring a State to defray a mandate for coverage of a benefit for which coverage was already required under the State's EHB-benchmark plan makes little sense and it also does not comport with the language of the ACA. Several commenters noted that the proposal applied a commonsense approach and would make the identification of benefits in addition to EHB more intuitive and innate.

Response: This policy change aligns with the plain language and intent of the ACA. Section 1311(d)(3)(B)(ii)(II) of the ACA requires States to defray the cost of any additional benefits described in clause (i), which refers to any benefits that the State requires a QHP to offer in addition to the essential health benefits specified under section 1302(b). Section 1302 of the ACA grants the Secretary broad authority to define EHB, directs that the EHB be equal in scope to the benefits provided under a typical employer plan, and that they include items and services in at least 10 general categories of EHB. Exercising the authority under section 1302(b), in 2013 we defined EHB using a benchmark-based approach whereby the State selects an EHB-benchmark plan that is utilized as a reference document for all plans subject to the EHB requirements in the State. Even after revisions to the EHB-benchmark policy over the years, States remain primarily responsible for selecting an EHB-benchmark plan that complies with scope of benefit requirements that ensure the EHB-benchmark is equal to the scope of benefits provided under a typical employer plan. This EHB-benchmark selection process is the cornerstone of how States define EHB, and we believe finalizing a policy whereby all benefits covered in a State's EHB-benchmark plan remain EHB revises the defrayal policy in a manner more consistent with the ACA, as well as the EHB-benchmark plan selection process. States will continue to be required to defray the cost of State mandated benefits that are in addition to EHB under the finalized standard.

We further note that this proposal is not introducing a change regarding benefits in an EHB-benchmark plan generally being EHB. Under longstanding policy, EHB are defined by HHS with a State benchmark-based framework, such that an issuer subject to EHB requirements must provide benefits that are substantially equal to the benefits selected by the State in its EHB-benchmark plan. Furthermore, statutory guardrails on States expanding EHB in their States remain in place. As described in the preamble to § 156.111, the typicality standard functions as both a ceiling and floor to limit a State's EHB-benchmark plan selections. Benefits can be defined as EHB in a State through two avenues: (1) they were mandated by State action prior to December 31, 2011, and/or (2) they are included in a State's EHB-benchmark plan or otherwise required as EHB pursuant to § 156.115. The distinction of which avenue defines a benefit as an EHB is meaningless for all purposes except for the analysis of defrayal obligations arising from State mandates and for whether the benefit can be substituted under § 156.115(b). Under the prior policy, a benefit that was selected as an EHB in a State's EHB-benchmark plan could shift to being a

benefit that is ''in addition to EHB'' for purposes of defrayal if the State mandates such coverage after December 31, 2011, and the State did not have a mandate for such coverage in place prior to December 31, 2011. Under the finalized policy, there will be no obligation for the State to defray the cost of a State mandate enacted after December 31, 2011, that requires coverage of a benefit covered in the State's EHB-benchmark plan.

Comment: One commenter suggested that the proposed change to the additional benefits rule is impermissibly arbitrary and capricious under the Administrative Procedure Act (APA) because it fails to address how the current rule is designed to guard against the concern, previously recognized by the agency, that a State could ''embed any desired benefit mandate into the EHB-benchmark plan, without any requirement to defray the obligation'' (83 FR 17010). Another commenter commended HHS for responding to interested party comments submitted to the EHB RFI (87 FR 74097). Another commenter suggested that the statutory language does not contain an exception to the defrayal process for benefits that become EHB because of their inclusion in a State's EHB-benchmark plan. That commenter asserted that the proposal departs from the plain language of the ACA, as well as the defrayal framework as developed through years of rulemaking and guidance, and suggested that, rather than introducing further ambiguity into the EHB cost defrayal process, CMS reiterate the position it articulated in the 2019 Notice of Benefit and Payment Parameters that State-required benefits mandated by State action taking place after December 31, 2011, other than for purposes of compliance with Federal requirements, would continue to be considered in addition to EHB even if embedded in the State's newly selected EHB-benchmark plan under the proposals at § 156.111.[130]

Response: We acknowledge that a concern over States embedding any desired benefit mandate into their EHB-benchmark plan without any requirement to defray the obligation informed the finalization of the requirements in the 2019 Payment Notice. However, in the 5 years since that rule was finalized, we have received consistent feedback that the standard was confusing and hindering State compliance with defrayal requirements. Many commenters to the EHB RFI in 2022 specifically recommended repealing or modifying § 155.170(a)(2) to define benefits in a State's EHB-benchmark plan as not ''in addition to EHB.'' Further, States are limited in the benefits that they can embed in their EHB-benchmark plans, as they must continue to meet the requirements as finalized in this rule at § 156.111(b)(2)(ii). We believe the consumer protections resulting from this policy change outweigh the prior concern over States embedding any desired benefit mandate into their EHB-benchmark plan without any requirement to defray.

Comment: Many commenters that opposed the proposal expressed concerns that it would lead to a dramatic increase in the volume of State benefit mandates and drive-up premiums for consumers and employers, increase costs for the Federal Government and taxpayers, and reduce the availability of affordable Exchange plan options. A few commenters who supported the proposal also noted that State policymakers must be cognizant of the impact any new mandates could have on premiums and Federal tax credits. A State's Department of Insurance noted that allowing the State to require QHPs to cover additional benefits without defrayal of costs provides the State needed flexibility over plan benefits to optimize affordability and health benefit comprehensiveness.

Response: Based on experience providing technical assistance to States that are considering State-mandated benefits or changes to its EHB-benchmark plans, we believe that States appropriately balance the need for coverage of a specific benefit with the potential impact it may have on costs. This analysis typically includes a consideration of the impact on premiums and the corresponding impact on tax credits. We do not disagree with commenters that this amendment may result in increased Federal outlays in the form of higher APTC; however, this defrayal rule does not increase the opportunity for States to increase the generosity of their EHB-benchmark plans more than is already theoretically possible, as States have been always permitted to add benefits to their EHB-benchmark plan, provided those additions comply with the scope of benefits requirements at 45 CFR 156.111(b)(2). In States that update EHB-benchmark plans to add benefits, the costs of which are currently being defrayed by the State, the percentage of premium attributable to coverage of EHB for purpose of calculating would increase just as if the State updated its EHB-benchmark plan through the process set forth in § 156.111 and in compliance with the scope of benefits requirements. In a State that enacts a mandate for a benefit that is currently covered in its EHB-benchmark plan, there will be no effect on premium tax credits as the benefit was already included in the percentage of premium attributable to coverage of EHB for purpose of calculating since it was EHB.

Comment: A few commenters expressed concern that under the proposed rule, there is no guardrail to prevent manipulation of the EHB-benchmark plan to avoid cost defrayal—especially because the agency is also proposing to eliminate the generosity standard at § 156.111 that limits the selection of benefits in EHB-benchmark plans. A commenter stated that in light of removing the generosity standard it is negligent of CMS to propose rules that do not require a financial analysis of the costs that may be incurred by mandates and expressed concern that without such financial analysis, CMS has no method of determining the cost of the new plan, which, with enhanced benefits, may have substantially higher premiums and increase the cost of APTC that will be incurred by the Federal Government.

A commenter articulated a sequence of events this commenter believes could lead to States manipulating the EHB-benchmark plan update process to avoid defrayal. The commenter supposed that a State enacts a mandate applicable only to large group health plans (and not QHPs) which would not require defrayal. Afterwards, the State updates its-EHB-benchmark to cover that benefit, using the large group plans that were required to cover it as a reference point for a ''typical'' employer plan. Individual and small group plans would then be required to cover the benefit as an EHB, with no cost defrayal—even though the benefit was not included in any typical employer plan before the State mandated it. The commenter stated that CMS has provided no reasonable justification for opening the door to such manipulation, nor any alternative guardrails. A different commenter noted a similar concern that under the proposal, States could seamlessly switch from State action to benchmarking for mandates without incurring costs, and existing mandates could transition into EHBs through EHB-benchmark plan updates.

Another commenter remarked that changes to a State's EHB-benchmark plan take a long time (noting that if a State identifies a particular need in the summer of 2024, it would not be able to adopt a new EHB-benchmark plan that addressed that need until, at a minimum, plan year 2027). The

[130] 85 FR 29164, 29218.

commenter stated that States may legitimately believe that the EHB-benchmark update timeline is unacceptable when lack of coverage for a particular service is contributing to health disparities and worsening the health of the State's population. As a result, the commenter explained that some States have contemplated the option of enacting a mandate through legislation or administrative action that has immediate effect, while at the same time pursuing changes to the EHB-benchmark for a later date. While these States will likely be subject to defrayal requirements for the period of time that the State mandates coverage of a benefit without that benefit being covered under the State's EHB-benchmark plan, a State may be willing to assume temporarily the costs of mandated benefits in order for the benefit to be available to State residents sooner than the benefit can or will be added to the State's EHB-benchmark plan. The commenter noted that the policy, however, seems to indicate that once a State is subject to defrayal, it will continue to have to defray even if a benchmark change is subsequently adopted. The commenter suggested this result seems to be an unintended loophole in the current rules that is not necessary to advance the goals of the ACA, and its only effect is to deter States from seeking necessary coverage changes.

Response: We are not persuaded that States will use the additional flexibility afforded by this proposal to add unbounded benefits as EHB. In our experience providing technical assistance to States regarding State-mandated benefits and EHB-benchmark plan updates, States approach the provision of health benefits in good faith and with great consideration for ensuring balance between an appropriate scope of covered benefits with any corresponding increase in costs. States must continue to operate within the overall EHB framework established by HHS, and we intend to continue to provide robust technical assistance to States to ensure their compliance.

Further, we believe that the generosity standard is not necessary to ensure the State EHB-benchmark plan selections are not unbounded given that, as described in the preamble to section 156.111, the typicality standard functions as both a ceiling and floor to limit a State's EHB-benchmark plan selections. Specifically, the typicality standard alone limits the potential generosity of a State's EHB-benchmark plan to be no greater than the generosity provided by the most generous typical employer plan, because a State would be unable to demonstrate that a more generous plan was equal in scope to any of the typical employer plans defined at § 156.111(b)(2)(i).

The scenario the commenter was concerned about would allow for manipulation of the EHB-benchmark plan update process would not, in practice, present an opportunity for manipulation. States have been able to add individual benefits to their EHB-benchmark plans through the update process outlined at § 156.111 since the 2019 Payment Notice (83 FR 16930, 17009), which provided States with additional flexibility with respect to the benefits and coverage in the EHB-benchmark plans. In addition, we note that the EHB-benchmark plan update process is not instantaneous, and States incur costs to update their EHB-benchmark plans.

We believe there is a high likelihood that confusion related to the existing mandate defrayal policy has made it difficult for interested parties to discern whether States are complying with the defrayal requirements. With clearer standards, there will be less confusion about State defrayal obligations.

We agree that the policy subjecting a State to defrayal of a benefit even if the State subsequently adds coverage of that benefit to the State's EHB-benchmark plan is counterintuitive and does not advance the goals of the ACA.

Comment: A commenter suggested that if the proposal is finalized, it would only apply to benefits that are ''already covered in the State's EHB [benchmark plan]'' at the time the mandate is passed rather than applying prospectively to benefits added to a benchmark plan after the mandate is passed.

Response: We believe this commenter's approach would not sufficiently address the concerns about benefits that States, issuers, and consumers believe are subject to EHB protections (based on their inclusion in a State's EHB-benchmark plan) not being EHB because of the defrayal provision. The approach would also further perpetuate a complex and confusing standard. Furthermore, under the commenter's suggestion, a State mandate would result in certain benefits never being able to become EHB (regardless of whether they are added to the EHB-benchmark plan in the future).

Comment: A commenter requested that HHS reiterate that State legislation stating that a benefit mandate is not to be considered an addition to EHB does not override the defrayal requirement. The commenter also expressed concern over the increasing trend for States to pass legislation with clauses stating that a benefit mandate will not be operative if there is a finding that the mandate requires defrayal under the requirements in § 155.170.

Response: States may not exempt themselves from the Federal requirement to defray State mandated benefits that are in addition to EHB through State legislation. While clauses stating that a benefit mandate will not be operative if there is a finding that the mandate requires defrayal are not prohibited by § 155.170, we caution States that, absent clear direction from the State following the bill's passing as to whether or not the State has identified the required benefit as in addition to or not in addition to EHB, such clauses cause confusion for issuers about whether a benefit mandate is in effect and whether the benefit is in addition to EHB (and therefore whether the benefit is subject to the various rules applicable to the EHBs, including the prohibition on discrimination in accordance with § 156.125, limitations on cost sharing in accordance with § 156.130, and restrictions on annual or lifetime dollar limits in accordance with § 147.126). We recommend that States issue bulletins or guidance for issuers with a determination of whether the benefit mandate is in effect as soon as possible after conducting an analysis of whether the benefit mandate requires defrayal.

We have also noticed State legislative bills that include clauses stating that the requirement to defray mandates is precluded if HHS fails to respond to the State's request for confirmation of whether new mandates require defrayal within a certain time. Under § 155.170, such provisions do not comply with § 155.170 as they inappropriately put the onus on HHS to decide whether the mandate is in addition to EHB rather than on the State. Failure by HHS to respond to State requests asking for a determination of whether new mandates require defrayal does not excuse States from defrayal requirements. Under § 155.170, it is the State's responsibility to identify which State required benefits require defrayal. While States are encouraged to reach out to us concerning State defrayal questions in advance of passing and implementing benefit mandates, HHS does not provide determination of whether a benefit mandate requires defrayal.

4. Consumer Assistance Tools and Programs of an Exchange (§ 155.205)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82554), we proposed at § 155.205(a) to establish additional minimum standards for Exchange call

center operations, including requirements that all Exchanges, other than SBE–FPs and SHOP Exchanges that do not provide for enrollment in SHOP coverage through an online SHOP enrollment platform, meet the following additional requirements: their call center must provide consumers with access to a live call center representative during the Exchanges' published hours of operation; and their live call center representatives must be able to assist consumers with their QHP application, which includes providing consumers information on their APTC and CSR eligibility, helping consumers understand their QHP options, helping consumers select a QHP, and helping consumers submit QHP enrollment applications to the Exchange. We are finalizing these standards with modifications.

Currently, § 155.205(a) requires that Exchanges provide for operation of a consumer-accessible, toll-free call center that addresses the needs of consumers requesting assistance. For a State requesting to establish a State Exchange, we review its plans to implement and meet call center requirements under § 155.205(a) as described in the State Exchange Blueprint application. Through the Blueprint process, we review and assess a State's call center operational plan for consistency with standards governing its hours of operation, staffing levels, and service level goals (including wait times and abandonment rates), as well as for consistency with best practices utilized by existing Exchanges, including the FFEs' call center. Once a State Exchange has been established and is operating, HHS monitors Exchange call center operations through the annual collection of performance monitoring data, as specified at § 155.1200(b)(3). The data collected includes call center volume, wait times, calls abandoned, and average call center handle time.[131]

As stated in the proposed rule (88 FR 82554), we recognize the value in each Exchange being able to tailor customer service level expectations based on their experience in the areas they serve, including setting hours of operation that meet the needs of their consumers. As such, we did not propose to establish minimum standards for customer service staffing levels. We will continue to assess and monitor Exchanges' compliance with § 155.205(a) through the Blueprint process and annual collection of compliance reports, as specified at § 155.1200(b)(2). We also intend to utilize the finalized requirement that transitioning States submit documentation through their Blueprint application, which will strengthen our review of Exchange call center plans.

In this final rule, we are requiring that all Exchanges, other than SBE–FPs and SHOP Exchanges that do not provide for enrollment in SHOP coverage through an online SHOP enrollment platform, meet the following additional requirements: their call center must provide consumers with access to a live call center representative during the Exchanges' published hours of operation; and their live call center representatives must be able to assist consumers with their Exchange application, which includes providing consumers information on their APTC and CSR eligibility, facilitating a consumer's comparison of QHPs, and helping consumers submit their Exchange applications to the Exchange.

Sections 1311(d)(4)(B) and 1321 of the ACA require that Exchanges provide for the operation of a toll-free telephone hotline to respond to requests for assistance, and section 1413(b)(1)(A)(ii) of the ACA requires that a consumer's application for QHP coverage can be filed by telephone. We believe that our policy will support these statutory requirements by ensuring that consumers have access to live representatives with Exchange call centers, during a reliable window of time, who can assist consumers with their Exchange applications.

We believe that all State Exchange call centers already meet the minimum standards that were proposed, and we know that the call center for the Exchanges on the Federal platform are meeting them. As such, this policy seeks to standardize and strengthen Exchange consumer assistance capabilities without imposing additional burden on current Exchanges or hindering Exchanges' ability to be innovative in their call center functions. The changes finalized here will ensure that regardless of where a consumer is in the United States, the consumer will be able to speak to a live representative who can assist the consumer with the Exchange application process during the hours of operation for that State's call center. We also want to ensure that a State does not solely rely on an automated telephone system for Exchange application assistance because we believe speaking to a live representative will help troubleshoot consumer Exchange application issues, provide in real time an opportunity for a live representative to explain Exchange application terminology to a consumer, ensure the consumer provides the most correct information in the QHP application to alleviate unnecessary follow-up, and provide greater overall consumer satisfaction. We believe that call centers should have a basic level of customer service especially as they relate to hours and operations and staffing levels to limit wait times for Exchange application assistance. We also know based on our work with State Exchanges and the Exchanges on the Federal platform that the Exchanges have created and continue to maintain robust call centers.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with modifications to the proposed language at § 155.205(a) to clarify the role of a live call center representative during the Exchanges' published hours of operation is to assist consumers with submitting their Exchange application as required at § 155.405(c)(2)(ii).

We summarize and respond to public comments received on the proposed minimum standards for Exchange call center operations below.

Comment: Some commenters expressed concerns that the proposed requirement was meant to replace or duplicate the act of insurance sales or to significantly increase the scope of the assistance currently provided through an Exchange's live call center representatives.

Response: The intent of the proposal was not to revise the scope of assistance currently provided by live call center representatives, and instead was meant to bolster the consumer experience while Exchanges meet the basic statutory requirements at sections 1311(d)(4)(B) and 1413(b)(1)(A)(ii) of the ACA, which requires Exchanges to provide for the operation of a toll-free telephone hotline to respond to requests for assistance and to provide consumers with the ability to file an Exchange application by telephone.

Comment: Several commenters cited benefits to the proposal including increased consumer understanding of the Exchange application process through real-time conversation; continuity of coverage across health insurance programs since call centers often also support Medicaid enrollment assistance; and increased assistance to those with limited health insurance literacy, computer literacy, or limited internet access.

Response: We agree with the consumer assistance benefits highlighted in these comments and believe the finalized live call center representative requirement will aid consumers in these ways.

[131] OMB Control Number: 0938–1119.

Comment: Several commenters requested CMS also consider establishing a standard for call center wait times and abandonment rates.

Response: We did not consider wait times or abandonment rates in this proposal as we believe our current oversight mechanisms enable us to sufficiently review call center performance. Currently, § 155.205(a) requires that Exchanges provide for operation of a consumer-accessible, toll-free call center that addresses the needs of consumers requesting assistance. For a State requesting to establish a State Exchange, we review its plans to implement and meet call center requirements under § 155.205(a) as described in the State Exchange Blueprint application. Aside from the call center requirements under § 155.205(a), we utilize the Blueprint process to review and assess a State's call center operational plan for consistency with standards governing its hours of operation, staffing levels, and service level goals (including wait times and abandonment rates), as well as for consistency with best practices utilized by existing Exchanges, including the FFEs' call center. Once a State Exchange has been established and is operating, HHS monitors Exchange call center operations through the annual collection of performance monitoring data, as specified at § 155.1200(b)(3).

Comment: Several commenters requested CMS also consider establishing a standard requiring all call centers provide dedicated lines for consumers with disabilities and/or limited English proficiency.

Response: We did not consider dedicated lines for consumers living with disabilities and/or with limited English proficiency in this proposal. However, to ensure compliance with 155.205(a), we review to ensure that all Exchange call centers have a TTY line service available for consumers living with disabilities, a Spanish version of their website, and a dedicated line for oral interpretation services in at least 105 languages. Further, §§ 155.205(c)(1), (c)(2)(i), and (c)(3) require Exchanges, QHP issuers, and web brokers to provide both written translations and oral interpretations of information in plain language in a manner accessible to consumers with disabilities and limited English proficiency.

Comment: Several commenters stated that alignment of call center standards provides consumers with a more uniform experience regardless of Exchange model type or geography.

Response: We agree that the minimum standard finalized in this proposal will secure a more level consumer call center experience regardless of where in the country a consumer is located or what Exchange model is operating in their State.

Comment: A few commenters requested CMS make all call center data public similar to the release of Medicaid Unwinding call center data.

Response: We appreciate commenters' interest in publishing Exchange call center data. We are committed to providing transparency into Exchange operations and are exploring the release of call center data at a future time. Additionally, in the interest of transparency, we are considering the development of new tools, potentially through future rulemaking, that will provide further public understanding into the performance of Exchanges.

Comment: A few commenters opposed the proposal citing the need for State flexibility in establishing call center standards including the incorporation of new call center technology to assist consumers.

Response: We appreciate and understand the need for State flexibility to meet the needs of their consumers. This policy does not aim to replace any technological investment States are willing to make to expand their call center offerings. Recognizing that budgetary constraints exist, and States often have to choose how to spend limited resources, we maintain that live call center representatives to assist consumers remains the minimum necessary to ensure sections 1311(d)(4)(B) and 1413(b)(1)(A)(ii) of the ACA are satisfied.

Comment: A few commenters opposed the proposal citing that CMS did not properly justify why the new live representative standard was needed.

Response: We disagree that this live call center representative minimum standard was not properly justified. We recognized and stated in the proposed rule that all Exchanges currently meet the newly proposed standard. However, we cannot guarantee that the minimum standard being finalized will continue to be met in future years by the present Exchanges or by States looking to transition to State Exchanges in the future. As we stated in the proposed rule, we believe speaking to a live representative would help troubleshoot consumer Exchange application issues, provide in real time an opportunity for a live representative to explain Exchange application terminology to a consumer, ensure the consumer provides the most correct information in the Exchange application to alleviate unnecessary follow-up, and provide greater overall consumer satisfaction. Thus, to ensure continuity of the live call center representative standard, we have decided to finalize this proposal with the modifications noted above.

Comment: A few commenters opposed the proposal stating that requiring live call center representatives to assist a consumer with ''selecting a QHP'' violated their State laws since only licensed agents and brokers are permitted to engage in the business of insurance product solicitation in that State, and that the proposed standard would create de facto minimum staffing levels.

Response: As we previously explained in this final rule, the intent of this policy was not to revise the scope of assistance currently provided by live call center representatives and was instead meant to bolster the consumer experience while Exchanges meet the basic statutory requirements at sections 1311(d)(4)(B) and 1413(b)(1)(A)(ii) of the ACA, which requires Exchanges to provide for the operation of a toll-free telephone hotline to respond to requests for assistance and to provide consumers with the ability to file an Exchange application by telephone. This policy does not direct live call center representatives to solicit or sell insurance or engage in any similar practice related to insurance that generally requires a license under State law. As such, for the purpose of clarity, we have amended the regulatory language initially proposed in § 155.205(a) to clarify that live call center representatives will be required to facilitate a consumer's comparison of QHPs.

We recognize the value in each Exchange being able to tailor customer service level expectations based on their experience in the areas they serve. Consequently, we did not propose to establish minimum standards for customer service staffing levels. We will continue to assess and monitor Exchanges' compliance with § 155.205(a) through the Blueprint process and annual collection of compliance reports, as specified at § 155.1200(b)(2). As such, we are finalizing this provision with some changes to clarify that the role of a live call center representative during the Exchanges' published hours of operation is to assist consumers with their Exchange application as required at § 155.405(c)(2)(ii).

5. Requirement for Exchanges To Operate a Centralized Eligibility and Enrollment Platform on the Exchange's Website (§§ 155.205(b); 155.302(a)(1))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82554), we proposed to amend § 155.205(b)(4) to require that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), such that the Exchange allows for the submission of the single, streamlined application for enrollment in a QHP and insurance affordability programs by consumers, in accordance with § 155.405, through the Exchange's website, and that the Exchange performs eligibility determinations for all consumers based on submissions of the single, streamlined application. Further, we proposed to amend § 155.302(a)(1) to clarify that the Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), is the entity responsible for making all determinations regarding the eligibility for QHP coverage and insurance affordability programs regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website or on a non-Exchange website operated by an entity described under § 155.220, such as a web-broker defined at § 155.20, or a DE entity or QHP issuer described under § 155.221. As we believe the eligibility determination function is inherently a function that should only be performed by the Exchange, the amendment to § 155.302(a)(1) also clarifies that only the private vendors or State entities that an Exchange contracts with to operate its centralized eligibility and enrollment platform can perform this function on behalf of an Exchange, and prohibits an Exchange from solely relying on non-Exchange entities, including a web-broker (defined at § 155.20) or other entities under §§ 155.220 or 155.221, to make such eligibility determinations on behalf of an Exchange.

We also proposed to amend § 155.205(b)(5) to require that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, by relying on the Federal eligibility and enrollment platform) so that the Exchange (or, for an SBE–FP, the Federal eligibility and enrollment platform) meets the requirement under § 155.400(c) to maintain records of all effectuated enrollments in QHPs, including changes in effectuated QHP enrollments.

As background for these amendments, § 155.205(b) states that an Exchange must maintain an up-to-date website that allows consumers to receive eligibility determinations for QHPs and insurance affordability programs and provides standardized comparative information on each available QHP and a calculator to facilitate the comparison of available QHPs after the application of any APTC and any CSRs. Section 1413(c)(1) of the ACA also requires that Exchanges develop a secure electronic interface that allows consumers to apply for health insurance coverage online and electronically receive an eligibility determination and that Exchanges conduct verifications of eligibility through electronic data interfaces. However, currently, there is no explicit regulatory or statutory requirement that Exchanges operate a centralized eligibility and enrollment platform on their website for performing all eligibility determinations for QHPs and insurance affordability programs. Nonetheless, all Exchanges currently provide access to a centralized eligibility and enrollment platform and process for consumers that they serve, and all Exchanges also currently perform all eligibility determinations through the operation of a centralized eligibility and enrollment platform on their websites. In order to codify existing policy and practices and help set clear expectations for existing Exchanges and States that may seek to operate State Exchanges in the future, we proposed these amendments to require that Exchanges may not allow eligibility determinations to be made outside of the Exchanges' own centralized eligibility and enrollment platform by another entity for applications for QHP coverage nor for selections for enrollment in a QHP.

We also proposed to amend § 155.302(a) to codify the Exchange's obligation and role as the sole entity responsible for conducting eligibility determinations. For example, if an Exchange permits an eligible web-broker to operate a non-Exchange website that interfaces with an Exchange to assist consumers with DE in QHPs offered through the Exchange as described in §§ 155.220(c)(3) and 155.221, the Exchange must ensure that the Exchange continues to maintain responsibility for conducting all eligibility determinations for applications submitted for QHP coverage and related insurance affordability programs. While HHS has not delegated these functions to DE entities in FFE and SBE–FP States, currently, Exchanges may allow entities described in § 155.220, among others that meet applicable requirements, to be able to function as an eligible contracting entity under § 155.110(a) that can carry out determinations regarding QHP coverage eligibility and eligibility for related insurance affordability programs on behalf of the Exchange. This amendment to § 155.302(a) prohibits Exchanges from delegating the responsibility to conduct eligibility determinations to any non-Exchange entities, besides entities that the Exchanges have elected to contract with to operate the centralized eligibility and enrollment platform. Consistent with these amendments, we proposed to maintain the current requirement under § 155.302(a) that SBE–FPs rely on HHS, through the operation of the centralized *HealthCare.gov* eligibility and enrollment platform, to carry out all eligibility determinations for their Exchanges.

As we also stated in the proposed rule (88 FR 82555), this proposal ties together the disparate, but related, requirements that exist across 45 CFR part 155 that speak to the real-time and tightly integrated nature of the online eligibility functions that Exchanges are required to perform (specifically the tight integration needed between the Exchange-operated website, single streamlined application, and back-end automated eligibility verifications based on information provided by applicants to arrive at an eligibility determination), by clearly stating the principle that Exchanges are solely responsible for conducting eligibility determinations, and that Exchanges need to meet the required eligibility functions that exist across 45 CFR part 155 through operating a centralized eligibility and enrollment platform on their website, regardless of whether an application is submitted through the Exchanges' website or through eligible non-Exchange entities that are assisting an individual in enrolling in a QHP.

We believe the lack of a clear statement in the regulations at 45 CFR part 155 affirming the requirement that the Exchange must make all determinations regarding eligibility for QHP coverage and related insurance affordability programs through a centralized eligibility and enrollment platform on the Exchange's website are oversights, as other sections of the regulations implementing the ACA in title 45 of the CFR allude to a requirement or expectation that an Exchange operates in this way already, or the regulations are written in a way such that it would be difficult to fulfill

their requirements if an Exchange did not operate as proposed in these amendments.

As an example of an implementing regulation of the ACA that would require an Exchange to operate in this manner, § 155.220 permits qualified individuals to be enrolled in a QHP through the Exchange with the assistance of a web-broker, while § 155.220(c)(3)(ii)(A), and by reference § 155.220(c)(3)(i)(F), require that if the non-Exchange website of a web-broker is used to complete an Exchange eligibility application, that web-broker's website must also provide consumers with the ability to withdraw from the process and use the Exchange's website described in § 155.205(b) instead at any time. If an Exchange did not provide an ability on its website for a consumer to complete an eligibility application, then it would not be possible to fulfill the requirements of §§ 155.220(c)(3)(ii)(A) and (i)(F).

To ensure that the requirements of §§ 155.220(c)(3)(ii)(A) and (i)(F), and 155.205(b) are fulfilled, we believe it is important that Exchanges allow a consumer to continue the application process through the centralized eligibility and enrollment platform operated on the Exchange's own website should the consumer chose to withdraw from the application process that was begun on a web-broker's non-Exchange website; or, if the Exchange is an SBE–FP, allow the consumer to continue the application process through the website of the Federal platform.

As another example, QHP issuers that assist consumers with enrollment in QHPs are currently required under § 156.265(b)(2) to either direct the consumer to the Exchange's website to file an eligibility application or ensure that the consumer's eligibility application is completed through the Exchange website or submitted through Exchange-approved web services in order for the Exchange to conduct an eligibility determination. To align with these requirements, we believe that it is important to finalize the amendment to § 155.302(a)(1) to provide that an Exchange must perform all eligibility determinations through operating a centralized eligibility and enrollment platform on the Exchange's website, and that only those entities that an Exchange chooses to enter into an agreement with to operate its centralized eligibility and enrollment platform, as allowed for under § 155.110(a), can carry out this function on behalf of the Exchange.

In addition to these examples of how current regulations may require an Exchange to operate according to the proposed amendments to §§ 155.205 and 155.302, we believe that consumers may be harmed without these policies in place. If an entity other than the Exchange conducted eligibility determinations, consumers might receive incorrect or inconsistent eligibility determinations, as entities other than the Exchange may not update their systems with the same eligibility determination rules or logic as the Exchange itself when Federal or State policies or regulations impacting eligibility for QHP coverage and insurance affordability programs come into effect or are updated, including the implementation and maintenance of State-specific eligibility rules and logic for Medicaid and CHIP programs. As a result, a non-centralized eligibility system model introduces increased program integrity risk as to the accuracy of eligibility determinations, which introduces increased risk of inaccurate APTC payments to QHP issuers and increased risk to consumers of potential tax liability when filing taxes and reconciling their APTC with the PTC allowed.

In addition, the websites and eligibility platforms provided by non-Exchange entities may not include the same informational content for consumers that an Exchange provides to consumers through the Exchange's website, such as information related to Medicaid and CHIP programs or the availability of special enrollment periods before or after the open enrollment period. As a result, some consumers might not provide information in their application in such a manner as to receive a correct eligibility determination and thus, enroll in the wrong coverage or not enroll in any coverage. Lastly, consumers may prefer to enroll directly through the eligibility and enrollment platform hosted and operated on an Exchange's website because they are more comfortable with sharing their personal information through a platform hosted by the Exchange.

In light of these considerations, we proposed to amend §§ 155.205(b)(4) and (5), and 155.302(a)(1) to address these gaps. Since all Exchanges currently provide access to a centralized eligibility and enrollment platform and process for consumers that they serve, and all Exchanges also currently perform all eligibility determinations through the operation of a centralized eligibility and enrollment platform on their websites, we believe the impact of these policies are minimal.

We sought comment on these proposals.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed. We summarize and respond to public comments received on the proposed requirement that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website below.

Comment: Several commenters opposed the proposed policy requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website, citing that it undermines State flexibility to operate their own Exchanges. One commenter noted that State flexibility is the hallmark of the State Exchange model, and if HHS' goal is for more States to implement State Exchanges, then this proposal should not be implemented. A few commenters opposed to the proposal asserted that HHS is dictating a specific technical approach that will potentially restrict States from employing innovative or more suitable solutions.

Response: As we noted in the preamble to this provision, this proposal codifies and ties together existing regulatory requirements under 45 CFR part 155 that require a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website. Furthermore, all Exchanges currently provide access to a centralized eligibility and enrollment platform and process for the consumers that they serve, and all Exchanges also currently perform all eligibility determinations through the operation of a centralized eligibility and enrollment platform on their websites. While this proposal is consistent with current policy and State practice, there may be States transitioning to State Exchanges in the future that would not prioritize establishing a centralized eligibility and enrollment platform in the absence of this policy. This standard will ensure State Exchange accountability for conducting eligibility determinations, and ensure program integrity in adjudicating eligibility applications, while preserving State flexibility to allow consumers access to DE entity application assisters and permitting web-brokers and QHP issuers to assist consumers with direct enrollment in QHPs. Additionally, this provision does not limit State flexibility to contract with an eligible vendor, State Medicaid agency, or other State agency that may offer various technical solutions for eligibility system operations.

Based upon current State initiatives to transition from an FFE to a State Exchange, as well as ongoing interest in the State Exchange model from other FFE States, we do not believe that

finalizing this policy will meaningfully discourage States from transitioning to or maintaining their status as a State Exchange.

Finally, we disagree that the proposal could limit States' ability to employ innovative or more suitable technical solutions. While the proposal obligates a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website, it is not prescriptive concerning the technical infrastructure supporting the system, nor does it regulate the number and types of entities an Exchange may contract with to develop and operate a centralized eligibility and enrollment platform.

Comment: A few commenters opposed the proposal clarifying that the State Exchange is the entity responsible for making all determinations regarding eligibility for QHP coverage, citing that State Exchanges should have the flexibility to support eligibility and enrollment functions through contractual arrangements with web-brokers or DE entities.

One commenter opposed to the proposal sought clarification regarding whether State Exchanges could leverage EDE entities to support eligibility and enrollment operations, and questioned whether a State Exchange can contract with multiple entities to fulfill the requirement for an Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website. Relatedly, a few commenters opposed to the proposal observed that some State Exchanges' eligibility and enrollment platforms are provided by private entities that serve as web-brokers in other States; these commenters requested HHS clarify that this arrangement is allowable.

One commenter opposed this proposal noting it ''conflicts with current regulations that allow web brokers to enroll people in QHPs 'in a manner that constitutes enrollment through the Exchange.' '' The commenter asserted that through the regulation's use of the word ''constitutes,'' this regulation allows State Exchanges to establish enrollment pathways that qualify as enrollment through the Exchange, but do not actually enroll consumers through the Exchange.

Response: We are amending § 155.302(a)(1) to clarify that the State Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website, is the entity responsible for making all determinations regarding eligibility for QHP coverage and insurance affordability programs, regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website or on a non-Exchange website operated by an entity described under § 155.220, such as a web-broker defined at § 155.20, a DE entity per § 155.221, or a QHP issuer described under §§ 155.221 and 156.1230.

It is necessary to elucidate the Exchange's obligation and role as the sole entity responsible for conducting eligibility determinations to ensure accountability for eligibility determinations, accuracy and uniformity in the eligibility determination process, and consistency with existing regulatory requirements under 45 CFR part 155.

In response to the comment seeking clarification regarding whether State Exchanges can contract with EDE entities for the centralized eligibility and enrollment platform on the Exchange's website, we point to the amendment at § 155.302(a)(1) that prohibits an Exchange from relying on an entity described under § 155.220, such as a web-broker defined at § 155.20, or a DE entity (which includes EDE entities) described under § 155.221, from making eligibility determinations on behalf of the Exchange. Therefore, this regulation precludes DE and EDE entities from entering into arrangements with an Exchange to operate its centralized eligibility and enrollment platform. However, §§ 155.220 and 155.221 detail the scope of the eligibility- and enrollment-related support functions DE and EDE entities can perform on behalf of an Exchange, through an agreement with the Exchange.

In response to the comment inquiring whether a State Exchange can contract with multiple entities to fulfill the requirement for an Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website, we confirm that a State Exchange can enter into an agreement with one or more entities to operate its centralized eligibility and enrollment platform, as allowed for under § 155.110(a), and in accordance with the regulation at § 155.302(a)(1).

As we believe the eligibility determination function is inherently a function that should only be performed by the Exchange, the amendment to § 155.302(a)(1) clarifies that only the private vendors or State entities that an Exchange contracts with to operate its centralized eligibility and enrollment platform can perform this function on behalf of an Exchange, and prohibits an Exchange from solely relying on non-Exchange entities, including a web-broker (defined at § 155.20) or other entities under §§ 155.220 or 155.221, to make such eligibility determinations on behalf of an Exchange.

In response to the comments observing that some State Exchanges' eligibility and enrollment platforms are provided by private entities that serve as web-brokers in other States, we note that only those entities that an Exchange chooses to enter into an agreement with to operate its centralized eligibility and enrollment platform, as allowed for under §§ 155.110(a) and 155.302(a), can perform eligibility determinations on behalf of the Exchange. In turn, private entities that an Exchange has contractual relationships with outside of operating its centralized eligibility and enrollment platform, would not be allowed to perform eligibility determinations on behalf of the Exchange.

Finally, concerning the comment charging that this proposal conflicts with current regulations allowing web-brokers to enroll qualified individuals in QHPs in a manner that constitutes enrollment through the Exchange, we disagree that the requirement for an Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website is inconsistent with web-brokers' ability to assist consumers with direct enrollment in QHPs, as described in § 155.220(a)(2). A web-broker's ability to assist consumers with their eligibility application submission and enrollment in QHPs is separate and distinct from the eligibility determination function reserved for the State Exchange's centralized eligibility and enrollment platform on the Exchange's website (which can be delivered by a private vendor or State entity under contract with the State Exchange). The requirement for an Exchange to operate a centralized eligibility and enrollment platform does not preclude web-brokers' ability to assist consumers with enrollment in QHPs in a manner that constitutes enrollment through the State Exchange.

While § 155.220(a)(2) allows web-brokers to enroll qualified individuals in a QHP in a manner that constitutes enrollment through the Exchange, the web-broker's non-Exchange website must interface with the State Exchange's centralized eligibility and enrollment platform to assist consumers with direct enrollment in QHPs. The State's centralized eligibility and enrollment platform serves as the system of record for all effectuated enrollments in QHPs, in accordance with § 155.400. Therefore, the amendments to §§ 155.205(b)(4) and 155.302(a)(1) requiring that an Exchange operate a centralized eligibility and

enrollment platform on the Exchange's website, and setting forth that the Exchange, through the centralized eligibility and enrollment platform, is the entity responsible for making all eligibility determinations for QHP coverage and insurance affordability programs, are codifying existing policy and practice, and are not limiting or negating the ability of web-brokers to enroll qualified individuals in a QHP in a manner that constitutes enrollment through the Exchange, or otherwise restricting opportunities for State Exchanges to expand enrollment pathways. As Exchange enrollment channels continue to diversify, we are providing this clarification for DE entities, existing Exchanges, and States that may seek to operate State Exchanges in the future.

Comment: A few commenters opposed the proposal requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website, stating that the proposal is too vague (which could lead to inconsistent State interpretation and implementation) or is not supported by CMS' rationale.

Response: We disagree with these comments, as the intent of the proposal is to codify and tie together existing regulations at 45 CFR part 155 that require an Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), such that the Exchange allows for the submission of the single, streamlined application for enrollment in a QHP and insurance affordability programs by consumers, and the Exchange performs eligibility determinations for all consumers based on submissions of the single, streamlined application.

Further, with this proposal we are making clear that the Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), is the entity responsible for making all determinations regarding the eligibility for QHP coverage and—in coordination with State Medicaid and CHIP agencies—insurance affordability programs, regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website or on a non-Exchange website operated by an entity described under § 155.220, such as a web-broker defined at § 155.20, or a DE entity or QHP issuer described under § 155.221.

Comment: One commenter opposed the proposal and stated that it will increase the cost of health insurance.

Response: We disagree that this proposal will increase the cost of health insurance. The proposal codifies and ties together existing regulatory requirements across 45 CFR part 155 that require a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website. Furthermore, all Exchanges currently provide access to a centralized eligibility and enrollment platform and process for the consumers that they serve, and all Exchanges also currently perform all eligibility determinations through the operation of a centralized eligibility and enrollment platform on their websites. As the commenter did not explain how this proposal would increase the cost of health insurance, we cannot further address the commenter's assertion.

Comment: Many commenters supported the proposal requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website and stated that it will increase consumer protections and reduce consumer risk. Several commenters emphasized the risk of individuals receiving inconsistent, confusing, or inaccurate results and information if entities other than the Exchange conduct eligibility determinations, including potential impact to consumers regarding their receipt of financial assistance, their plan choice, or their tax liability.

Response: We agree that consumers may be harmed without this policy in place. As we stated in the preamble, if an entity other than the Exchange conducts eligibility determinations, consumers might receive incorrect or inconsistent eligibility determinations, as entities other than the Exchange may not update their systems with the same eligibility determination rules or logic as the Exchange itself when Federal or State policies or regulations impacting eligibility for QHP coverage and insurance affordability programs come into effect or are updated, including the implementation and maintenance of State-specific eligibility rules and logic for Medicaid and CHIP programs. As a result, a non-centralized eligibility system model introduces increased program integrity risk as to the accuracy of eligibility determinations, increased risk of inaccurate APTC payments to QHP issuers, and increased risk to consumers of potential tax liability when filing taxes and reconciling their APTC with the PTC allowed.

Comment: Many commenters supported the proposal clarifying that a State Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website, is solely responsible for making all determinations regarding consumer eligibility for QHP coverage and insurance affordability programs. Several commenters supported codifying the prohibition on non-Exchange entities (such as web-brokers or DE entities) rendering eligibility determinations.

Response: As noted in the preamble, we agree that the Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform), is the entity responsible for making all determinations regarding the eligibility for QHP coverage and insurance affordability programs regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website or on a non-Exchange website operated by an entity described under § 155.220, such as a web-broker defined at § 155.20, or a DE entity or QHP issuer described under § 155.221.

As we believe the eligibility determination function is inherently a function that should only be performed by the Exchange, the policy also clarifies that only the private vendors or State entities that an Exchange contracts with to operate its centralized eligibility and enrollment platform can perform this function on behalf of an Exchange, and prohibits an Exchange from solely relying on non-Exchange entities, including a web-broker (defined at § 155.20) or other entities under §§ 155.220 or 155.221, to make such eligibility determinations on behalf of an Exchange.

Comment: Several commenters stated that the proposed policy will make enrollment into coverage easier, more streamlined, or more efficient for consumers, will ensure transparency, accountability, and accuracy for applicants, or will help reduce administrative barriers for individuals seeking coverage through an Exchange.

Response: We agree that the proposal requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website will support a more accurate and efficient eligibility determination and enrollment experience for applicants and reduce administrative barriers for consumers pursuing coverage through an Exchange. As noted in the preamble, an Exchange must maintain an up-to-date website that allows consumers to receive eligibility determinations for QHPs and insurance affordability programs. This proposal codifies existing policy and practices and helps set clear expectations for current Exchanges and

States that may seek to operate State Exchanges in the future.

Comment: Several commenters supported the proposal requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website and noted that it would provide applicants with flexibility to continue applying for, and enrolling in, coverage through the centralized eligibility and enrollment platform on an Exchange's website, if they choose to withdraw an application initiated on the website of a non-Exchange entity. A few commenters observed that this flexibility is consistent with the ''no wrong door'' application process promoted by the ACA.

Response: To ensure that the requirements of §§ 155.220(c)(3)(ii)(A) and (i)(F), and 155.205(b) are fulfilled, we agree it is important that Exchanges allow a consumer to continue the application process through the centralized eligibility and enrollment platform operated on the Exchange's own website should the consumer choose to withdraw from the application process that was initiated on a web-broker's non-Exchange website (or, if the Exchange is an SBE–FP, allow the consumer to continue the application process through the website of the Federal platform). We also agree that by facilitating multiple pathways through which consumers can submit a single, streamlined application for QHP coverage and insurance affordability programs—whether through the State Exchange's centralized eligibility and enrollment platform on the Exchange's website, through non-Exchange websites hosted by web-brokers and DE entities (as allowed by the State Exchange), or through Medicaid and CHIP programs operating eligibility systems that aren't integrated with the State Exchange—this flexibility around application pathways for enrollment in QHP coverage and insurance affordability programs aligns with the ACA's ''no wrong door'' principle.

Comment: A few commenters supported the proposed policy requiring a State Exchange to operate a centralized eligibility and enrollment platform on the Exchange's website and stated that it would make it easier for State Exchanges to monitor and evaluate Exchange efficiency and effectiveness, as well as implement and maintain State-specific Medicaid and CHIP program rules.

Response: We agree that a State Exchange's centralized eligibility and enrollment platform, through which the Exchange conducts all eligibility determinations and maintains all records of effectuated QHP enrollments, should facilitate State oversight and review of Exchange eligibility and enrollment efficacy. We also agree that an Exchange's centralized eligibility and enrollment platform should enable timely system updates reflecting changes to State-specific eligibility rules and logic for the Medicaid and CHIP programs.

6. Ability of States To Permit Agents and Brokers and Web-Brokers To Assist Qualified Individuals, Qualified Employers, or Qualified Employees Enrolling in QHPs (§ 155.220(h))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82556 and 82557), we proposed to amend §§ 155.220(h)(2) and (3) by deleting the current references to ''the HHS reconsideration entity'' and replacing them with ''the CMS Administrator'' and by specifying that, instead of the HHS reconsideration entity, the CMS Administrator, who is a principal officer, would be the entity responsible for handling these reconsideration decisions. Agents, brokers, and web-brokers whose Exchange agreement(s) to participate in the FFEs or SBE–FPs have been terminated for cause would continue to have the ability to request a reconsideration of such action in the manner and form established by HHS by requesting a reconsideration within 30 calendar days of the date of the written termination notice from HHS. We proposed that the request for reconsideration would be made to the CMS Administrator. In the proposed rule, we stated this proposal would improve transparency by specifying who would review reconsideration requests under § 155.220(h).

Exchange agreement suspensions and terminations play a critical role in stopping potentially fraudulent enrollments or other fraudulent behavior in the FFEs and SBE–FPs. Currently, § 155.220(g) establishes the framework for suspension and termination of an agent's, broker's, or web-broker's Exchange agreement(s) for cause in four instances.[132] First, § 155.220(g)(1) allows HHS to terminate an agent's, broker's, or web-broker's Exchange agreement(s) when there is a specific finding of noncompliance or pattern of noncompliance that is sufficiently severe. Second, § 155.220(g)(3)(ii) enables HHS to terminate an agent's or broker's Exchange agreement(s) when an agent or broker fails to maintain the appropriate license in every State in which the agent or broker actively assists consumers with applying for APTC and CSRs or with enrolling in QHPs through the FFEs and SBE–FPs. Third, HHS will terminate an agent's, broker's, or web-broker's Exchange agreement(s) under § 155.220(g)(5)(ii) when there is a finding or determination by a Federal or State entity that an agent, broker, or web-broker engaged in fraud or abusive conduct that may result in imminent or ongoing consumer harm using personally identifiable information (PII) of Exchange enrollees or applicants or in connection with an Exchange enrollment or application. Fourth, under § 155.220(g)(5)(i)(B), HHS may terminate an agent's, broker's, or web-broker's Exchange agreement(s) following a suspension of the agreement(s) under § 155.220(g)(5)(i)(A) if the agent, broker, or web-broker submitted rebuttal evidence that does not persuade HHS to lift the suspension, or if the agent, broker, or web-broker fails to submit rebuttal evidence during the suspension period.

If an agent's, broker's, or web-broker's Exchange agreement(s) has been terminated for cause, under § 155.220(h)(1), the agent, broker, or web-broker can request reconsideration of such action in the manner and form established by HHS. The agent, broker, or web-broker must submit the reconsideration request to the HHS reconsideration entity within 30 calendar days of the date of the written termination notice from HHS.[133] Current regulations also require the HHS reconsideration entity to notify the agent, broker, or web-broker of its decision, in writing, within 60 calendar days of the date it receives the request for reconsideration.[134] Currently, § 155.220(h)(3) further provides that this decision constitutes HHS' final determination.

The current framework in § 155.220(h) does not define or identify ''the HHS reconsideration entity'' responsible for making these decisions. As noted earlier in this final rule, we proposed revising §§ 155.220(h)(2) and (3) by deleting the existing references to ''the HHS reconsideration entity'' and replacing them with ''the CMS Administrator.'' This policy would ensure that authority to review requests for reconsideration of decisions to

[132] Section 155.220(f) establishes the framework for an agent, broker, or web-broker to terminate an agent's, broker's, or web-broker's Exchange agreement(s) with HHS. We did not propose any changes with respect to the terminations under § 155.220(f). These terminations are not eligible for reconsideration under § 155.220(h) because they are agent, broker, or web-broker initiated actions.

[133] 45 CFR 155.220(h)(2).

[134] 45 CFR 155.220(h)(3).

terminate an agent's, brokers, or web-broker's Exchange agreement(s) for cause are vested in a principal officer.

We sought comments on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this proposal without modification. We summarize and respond to public comments we received on this proposal below.

Comment: A few commenters expressed their support for the proposal by stating their approval of the clarification and improved transparency it will provide.

Response: We appreciate these comments in support of the amendments to § 155.220(h). As previously noted, this amendment specifies that agents, brokers, and web-brokers assisting consumers on the FFEs and SBE–FPs can submit a request to the CMS Administrator to reconsider HHS' decision to terminate their Exchange agreement(s) for cause.

7. Adding and Amending Language To Ensure Web-Brokers Operating in State Exchanges Meet Certain HHS Standards Applicable in the FFEs and SBE–FPs (§ 155.220)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82557), we proposed to amend § 155.220 to apply certain existing HHS standards for Exchanges that use the Federal platform that apply to web-brokers [135] assisting the FFEs' and SBE–FPs' [136] consumers with enrolling in QHPs and/or assisting consumers with applying for APTC/CSRs in State Exchanges, for both the State Exchange's Individual Exchange and SHOP. In the proposed rule, we stated our proposals would ensure that minimum HHS standards governing web-broker non-Exchange website display of standardized QHP comparative information, disclaimer language, information on eligibility for APTC/CSRs, operational readiness, standards of conduct, and access by web-broker downstream agents and brokers apply to web-brokers across all Exchanges.[137] We believe that extending these standards across all Exchanges, to newly apply to State Exchanges, is important given the increased interest from State Exchanges in using web-brokers to assist consumers with enrollment in QHPs offered through Exchanges to maximize enrollment opportunities. The ability of consumers and applicants to have consistent, reliable information from web-brokers who, to the extent permitted by the State and the applicable Exchange, assist consumers with enrolling and applying for QHPs offered on the Exchange, with or without APTC and CSRs, in a manner that constitutes enrollment through the Exchange [138] is an important consumer safeguard, particularly given that web-brokers may operate across Exchange models. These proposals are intended to ensure that certain HHS standards are extended to protect State Exchange consumers as minimum requirements while also providing State Exchanges with continued flexibility and discretion to decide whether and how to utilize web-brokers to assist State Exchange consumers and applicants with enrolling in QHPs and applying for APTC/CSRs. Finally, these proposals align with other proposed changes to extend certain existing HHS standards at § 155.221 that currently apply to DE entities [139] assisting the FFEs' and SBE–FPs' consumers and applicants with direct enrollment in QHPs and applying for APTC/CSRs to also apply in State Exchanges. We proposed that these proposed changes would be effective on the date of publication of this final rule.

Section 1312(e) of the ACA provides that the HHS Secretary shall establish procedures under which a State may allow agents, brokers, and web-brokers to enroll individuals and small employers in QHPs offered through an Exchange and to assist individuals in applying for APTC/CSRs for QHPs sold through an Exchange. The Secretary also has authority under section 1321(a) of the ACA to promulgate regulations with respect to the establishment and operation of Exchanges, the offering of QHPs through such Exchanges, and such other requirements as the Secretary determines appropriate.[140] HHS previously leveraged these authorities to establish the existing agent, broker, and web-broker standards applicable in FFE and SBE–FP States codified in § 155.220.[141]

In new paragraph (n), we proposed to apply the web-broker standardized QHP comparative information and the accompanying Enrollment Support disclaimer requirements in § 155.220(c)(3)(i)(A) to web-brokers operating in State Exchanges, and consequently to these State Exchanges. Consistent with § 155.220(c)(3)(i)(A)(1) through (6), web-broker non-Exchange websites used to complete the QHP selection must disclose and display the standardized comparative QHP information provided by the Exchange or directly by QHP issuers, consistent with the requirements of § 155.205(c) for all QHPs, including Qualified Dental Plans (QDPs),[142] offered through the Exchange. The standardized comparative information on each available QHP that must be displayed by the web-broker on its non-Exchange website is the following information provided by the Exchange or directly by QHP issuers: (1) premium and cost-sharing information (total and net premium based on APTC and CSR, if applicable); [143] (2) the summary of benefits and coverage; (3) identification of whether the QHP is a bronze, silver, gold or platinum level plan, or a catastrophic plan; (4) the results of the enrollee satisfaction survey; (5) quality

[135] Web-broker is defined at § 155.20 as ''an individual agent or broker, group of agents or brokers, or business entity registered with an Exchange under § 155.220(d)(1) that develops and hosts a non-Exchange website that interfaces with an Exchange to assist consumers with direct enrollment in QHPs offered through the Exchange as described in § 155.220(c)(3) or § 155.221. The term also includes an agent or broker direct enrollment technology provider.''

[136] See § 155.220(l).

[137] The amendments to § 155.220 we are finalizing will not impact how agents, brokers, or web-brokers may assist consumers and applicants in SBE–FP States. Section 155.220(l) currently provides that an agent, broker, or web-broker who enrolls qualified individuals, qualified employers, or qualified employees in coverage in a manner that constitutes enrollment through an SBE–FP or assists individual market consumers with submission of applications for APTC and CSRs through an SBE–FP, must comply with all applicable FFE standards in § 155.220. We did not propose and are not finalizing any changes to this existing framework for agents, brokers, or web-brokers who provide assistance in SBE–FP States.

[138] See 77 FR 18334 through 18336.

[139] DE entities permitted to participate in the FFEs and SBE–FPs include, to the extent permitted by applicable State law: (1) QHP issuers that meet the applicable requirements in §§ 155.221 and 156.1230, and (2) web-brokers that meet the applicable requirements in §§ 155.220 and 155.221. 45 CFR 155.221(a).

[140] Section 1321(a)(1)(A), (B), and (D) of the ACA.

[141] See 77 FR 18444, as amended at 78 FR 15533; 78 FR 54134; 79 FR 13837; 81 FR 12338; 81 FR 94176; 84 FR 17563; 85 FR 37248; 86 FR 24288; 87 FR 27388; and 88 FR 25917.

[142] With some limited exceptions, QDPs are considered a type of QHP. See 77 FR 18315. Web-brokers assisting consumers in the FFEs and SBE–FPs are expected to follow the same requirements for QDPs as for QHPs, including display of all applicable QDPs offered through the Exchange and all available information specific to each QDP on their websites. However, because it is not possible to enroll in QDPs through DE unless also enrolling in medical QHPs, web-brokers are permitted to modify their QDP displays accordingly (for example, by displaying QDPs after medical QHPs to ensure a consumer has first selected a medical QHP). See CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 4.3, p.47 and Section 4.4.2, p. 52. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.* Under this proposal, these same standards governing QDPs would apply to web-brokers in State Exchanges.

[143] See CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 4.4.2, p. 52. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

ratings assigned by HHS; and (6) the provider directory made available to the Exchange. The results of the enrollee satisfaction survey should be displayed in accordance with instructions in the CMS Quality Rating Information Bulletin.[144] As described in the CMS Quality Rating Information Bulletin, State Exchanges already have some flexibility to customize the display of quality ratings assigned by HHS for their respective QHPs.[145] For example, State Exchanges can make some State-specific customizations, such as to incorporate additional State or local quality information or to modify the display names of the quality ratings assigned by HHS. Under this proposal, web-brokers in State Exchanges should use the same consumer-facing labels for the quality ratings that HHS displays on *HealthCare.gov* (that is, ''Overall Rating,'' ''Medical Care,'' ''Member Experience,'' and ''Plan Administration'') unless the State Exchange modified the display names for these labels. If the State Exchange has modified the display names, web-brokers operating in State Exchanges should use the display names used on the State Exchange website. Web-brokers operating in State Exchanges should also align their display of the quality ratings to reflect any permitted State-specific customizations, such as the addition of State or local quality information. Additionally, consistent with the approach for display of quality ratings by web-brokers in the FFEs and SBE–FPs and by State Exchanges, if a QHP was not eligible to receive a rating or did not receive a rating for other reasons, web-brokers participating in State Exchanges would need to display ''New plan—Not Rated'' or ''Not Rated'' in place of the quality ratings.[146] When displaying the quality rating assigned by HHS on their non-Exchange websites, web-brokers operating in State Exchanges would be required to prominently display the disclaimer language specified in the CMS Quality Rating Information Bulletin, which mirrors the language that web-brokers in the FFEs and SBE–FPs must display on their non-Exchange websites.[147]

State Exchanges are also currently required to display the quality ratings assigned by HHS and the results of the enrollee satisfaction survey, in the form and manner specified by the Secretary.[148] This includes prominently displaying the same disclaimer language on the State Exchange website or a static website when displaying the quality ratings assigned by HHS and the results of the enrollee satisfaction survey.[149] Web-brokers would be able to access QHP quality rating information for a State Exchange they are operating in, including the quality ratings assigned by HHS and enrollee satisfaction survey results,[150] from the State Exchange.

This list of standardized QHP comparative information that web-brokers must disclose and display on their non-Exchange websites used to complete QHP selection in FFE and SBE–FP States mirrors the information that Exchanges are required to disclose and display on their respective websites.[151] This approach ensures consumers have access to the same QHP comparative information whether they elect to enroll through the Exchange's website or through a web-broker's non-Exchange website. We proposed to extend these same standardized comparative information requirements, as minimum HHS standards, that would need to be met by web-brokers participating in State Exchanges and consequently to these State Exchanges. We similarly proposed to extend the Enrollment Support disclaimer referenced in § 155.220(c)(3)(i)(A) beyond FFE and SBE–FP States to also extend to web-brokers participating in State Exchanges and consequently to these State Exchanges. The goal of this disclaimer is to ensure consumers are clearly informed about any enrollment limitations on a web-broker's non-Exchange website and similarly have clear instructions for accessing the Exchange website if they wish to enroll in those QHPs. In particular, when a website of a web-broker is used in FFE or SBE–FP States to complete the QHP selection, but it does not support enrollment for a QHP,[152] the web-broker's website must prominently display the standardized Enrollment Support disclaimer[153] provided by HHS, as follows:

''(Name of Company) does not support enrollment in this Qualified Health Plan at this time. To enroll in this Qualified Health Plan, visit the Health Insurance Marketplace®[154] website at *HealthCare.gov*.''

To prominently display the disclaimer, it must be written in a font size no smaller than the majority of text on the website page and must be noticeable in the context of the website by (for example) using a font color that contrasts with the background of the website page.[155] In addition, the Enrollment Support disclaimer must appear on the web-broker's non-Exchange website in close proximity to where the QHP information is displayed if the web-broker does not support enrollment in any such QHP, so it is noticeable to the consumer.[156] Web-brokers can also meet this prominent display requirement if a visual cue is displayed where the enrollment button (or another similar mechanism) would otherwise appear for a particular QHP that clearly directs the consumer to the required disclaimer on the same website page or otherwise displays the required disclaimer (for example, in a pop-up bubble that appears while hovering over the visual cue).[157] We proposed to require web-brokers assisting consumers in State Exchanges to comply with these same requirements, while also providing these State Exchanges some flexibility regarding the disclaimer

[144] See CMS. (2023, May 2). *Quality Rating Information Bulletin*. CMS. Section III, p. 3. *https://www.cms.gov/files/document/py2024-qrs-display-bulletin.pdf*. See Exchange and Insurance Market Standards for 2015 and Beyond; Final Rule, 79 FR 30240 at 30310–30311 (May 27, 2014).

[145] §§ 155.1400 and 155.1405. Also see 85 FR 29214 through 29216.

[146] See CMS. (2023, May 2). *Quality Rating Information Bulletin*. CMS. Section III, p. 3. *https://www.cms.gov/files/document/py2024-qrs-display-bulletin.pdf*.

[147] *Id.*

[148] See §§ 155.1400 and 155.1405. Also see § 155.205(b)(1)(iv) and (v). Exchanges can satisfy the requirement to display the enrollee satisfaction survey results by displaying the quality ratings assigned by HHS (which incorporate member experience data from the survey). See 79 FR 30310 through 30311.

[149] See CMS. (2023, May 2). *Quality Rating Information Bulletin*. CMS. Section III, p. 3. *https://www.cms.gov/files/document/py2024-qrs-display-bulletin.pdf*.

[150] Consistent with the approach for Exchanges, for purposes of compliance with the HHS minimum standards, web-brokers would be able to satisfy the requirement to display the enrollee satisfaction survey results by displaying the quality ratings assigned by HHS (which incorporate member experience data from the survey).

[151] See § 155.205(b)(1). *Also see* 87 FR 642 (explaining that ''(i)ncluding this [list of] information within § 155.220, instead of through a cross-reference to § 155.205(b)(1), would provide better clarity and ease of reference. . .'').

[152] A web-broker's non-Exchange website may not support enrollment in a QHP if a web-broker does not have an appointment with a QHP issuer, and therefore, is not permitted under State law to enroll consumers in coverage offered by that issuer.

[153] CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual*. CMS. Section 4.4.2, p. 52. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf*.

[154] Health Insurance Marketplace® is a registered service mark of the HHS.

[155] See 78 FR 27260. Also see CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual*. CMS. Section 4.4.1, p. 49–50 and Section 4.4.2, p. 54–55. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf*.

[156] See 78 FR 27260. Also see CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual*. CMS. Section 4.4.2, p. 52. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf*.

[157] *Id.*

language required to be displayed by their web-brokers.

For State flexibility, under this proposal, the HHS-provided disclaimer language must be used as a minimum starting point, but State Exchanges may add State-specific language to the Enrollment Support disclaimer, provided the additional language does not conflict with the HHS-provided standardized disclaimer. This would permit a State Exchange to replace references and links to the Health Insurance Marketplace® and *HealthCare.gov* in the HHS-provided disclaimer language with the appropriate reference or links to the State Exchange's website for the Enrollment Support disclaimer that web-brokers assisting consumers in the State Exchange would be required to prominently display on their non-Exchange websites. Additionally, State Exchanges may require web-brokers operating in their State to translate the disclaimer text into languages appropriate for the State as this type of additional requirement would not conflict with the HHS-provided disclaimer language or minimum standards. As with all informational materials, standard plain language practice is to write at or near a fourth-grade reading level and not to exceed an eighth-grade reading level. We explained that we expect that any additional State-specific customizations to this disclaimer would be written accordingly, and that we would be available to provide technical assistance to State Exchanges that want to add State-specific language. We proposed to codify this State flexibility at new paragraph (n)(1).

In addition, consistent with § 155.220(c)(3)(i)(G), when used to assist FFE consumers, the web-broker's non-Exchange website must also prominently display a standardized disclaimer [158] provided by HHS, referred to as the General non-FFE disclaimer, that informs consumers and applicants that the web-broker's website is not the Exchange website, notes that the web-broker's non-Exchange website may not support enrollment in all QHPs, and provides a web link to the Exchange's website. This same requirement extends beyond the FFEs and also applies to SBE–FPs today.[159] In new paragraph (n), we proposed to extend this disclaimer requirement to also apply to web-brokers operating in State Exchanges, and consequently to these State Exchanges, while providing these State Exchanges some flexibility to add State-specific language to this disclaimer, provided the additional language does not conflict with the HHS-provided disclaimer language. We proposed to codify this State flexibility in new paragraph (n)(1). Similar to the adoption of this disclaimer for consumers in an FFE or an SBE–FP,[160] we stated in the proposed rule that we continue to believe this additional standard is in the best interest of consumers, as it would help them distinguish between the Exchange website and web-broker non-Exchange websites. We therefore also identified it as an important baseline consumer protection that should extend to consumers across all Exchanges.

The General non-FFE disclaimer provided by HHS that must be prominently displayed by web-brokers participating in the FFEs and SBE–FPs reads:

''Attention: This website is operated by (Name of Company) and is not the Health Insurance Marketplace® website. In offering this website, (Name of Company) is required to comply with all applicable Federal law, including the standards established under 45 CFR 155.220(c) and (d) and standards established under 45 CFR 155.260 to protect the privacy and security of personally identifiable information. This website may not support enrollment in all Qualified Health Plans (QHPs) being offered in your State through the Health Insurance Marketplace® website. For enrollment support in all available QHP options in your State, go to the Health Insurance Marketplace® website at *HealthCare.gov*.

Also, you should visit the Health Insurance Marketplace® website at *HealthCare.gov* if:

- You want to select a catastrophic health plan. (This only needs to be included if the web-broker does not offer catastrophic plans.)
- You want to enroll members of your household in separate QHPs. (This only needs to be included if the web-broker does not allow multiple enrollment groups for its Classic DE pathway; note that EDE Entities are required to support multiple enrollment groups.)
- You want to enroll members of your household in dental coverage. The plans offered here do not offer pediatric dental coverage and you want to choose a QHP offered by a different issuer that covers pediatric dental services or a separate dental plan with pediatric coverage. (This only needs to be included if the web-broker does not offer assistance with enrollment in adult coverage or pediatric dental coverage.)

(Name of web-broker's website) offers the opportunity to enroll in either QHPs or off-Marketplace coverage. Please visit *HealthCare.gov* for information on the benefits of enrolling in a QHP. Off-Marketplace coverage is not eligible for the cost savings offered for coverage through the Marketplaces. (This final paragraph must be displayed if the web-broker offers consumers assistance with off-Marketplace coverage options.)''

To prominently display this disclaimer, it must be written in a font size no smaller than the majority of text on the website page and must be noticeable in the context of the website by (for example) using a font color that contrasts with the background of the website page.[161] In addition, the disclaimer must be prominently displayed on both the initial user landing page and on the landing page displaying QHP options that appear before the applicant makes a decision to purchase coverage (QHP selection page). In FFE and SBE–FP States, the disclaimer must use the exact language provided by HHS, must include a functioning web link to *HealthCare.gov,* and must be viewable without requiring the user to select or click on an additional link. The disclaimer must also be displayed in the same non-English language as any language(s) the web-broker maintains screens for on its website.[162] The web-broker may change the font color, size, or graphic context of the information to ensure that it is noticeable to the user in the context of its website or the other written material. We proposed to require web-brokers assisting consumers in State Exchanges must comply with these same requirements for prominent display of this disclaimer.

Consistent with the policy for the extension of the Enrollment Support disclaimer to State Exchanges and their web-brokers, under this proposal, the HHS-provided disclaimer language must be used as a minimum starting point, but State Exchanges may add State-specific language, provided the additional language does not conflict with the HHS-provided standardized disclaimer.

This would permit State Exchanges to replace references and links to the Health Insurance Marketplace® and *HealthCare.gov* in the HHS-provided disclaimer language with the appropriate reference or links to the State Exchange's website for the

[158] CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 4.4.2, p. 54. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

[159] 45 CFR 155.220(l).

[160] 78 FR 37046.

[161] See 78 FR 27260. Also see CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 4.4.1, p. 49–50 and Section 4.4.2, p. 54–55. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

[162] See 45 CFR 155.205(c)(2)(iv)(C).

disclaimer under § 155.220(c)(3)(i)(G) that web-brokers assisting consumers in State Exchanges would be required to prominently display on their non-Exchange websites. Additionally, while web-brokers assisting consumers in State Exchanges would be required to specify in their disclaimer that they are subject to applicable Federal requirements, under this policy, we anticipate State Exchanges would leverage this flexibility to direct their web-brokers to omit citations to Federal requirements included in the HHS-provided language to the extent those provisions do not apply, such as § 155.220(d). State Exchanges would also be permitted under this proposal to modify the disclaimer required under § 155.220(c)(3)(i)(G) to specify applicable provisions of State law. Further, to the extent that web-brokers in State Exchanges may offer off-Exchange coverage options, we would require them to include the HHS-provided disclaimer language that distinguishes between such coverage options and QHPs sold through the Exchange, noting in particular that such off-Exchange coverage options are not eligible for cost savings offered with a QHP sold through the Exchange, and providing a link to the State Exchange website for more information. Similar to the approach adopted for web-brokers participating in FFE and SBE–FP States, bracketed language included in the HHS-provided disclaimer language would not be required for web-brokers assisting consumers in State Exchanges to comply with the HHS minimum standards unless applicable or otherwise required by the State Exchange. State Exchanges could also require web-brokers operating in their State to translate the disclaimer text required under § 155.220(c)(3)(i)(G) into languages appropriate for the State as this type of additional requirement would not conflict with the HHS-provided disclaimer language or minimum standards. As with all informational materials, standard plain language practice is to write at or near a fourth-grade reading level and not to exceed an eighth-grade reading level. We explained that HHS expects that any State-specific additions or customizations to this disclaimer would be written accordingly, and that we would be available to provide technical assistance to State Exchanges that want to add State-specific language to this disclaimer.

In new paragraph (n), we also proposed to extend the requirement in § 155.220(c)(3)(i)(I), which requires the prominent display by web-brokers of the information provided by HHS pertaining to a consumer's eligibility for APTC or CSRs on the web-broker's non-Exchange website, to web-brokers operating in State Exchanges and, consequently, to these State Exchanges. We established this requirement for web-brokers in FFE and SBE–FP States to increase the likelihood that consumers understand their potential eligibility for APTC and CSRs and potential liability for excess APTC repayment and can factor those determinations into their QHP selection and the amount of APTC they elect to take.[163] We identified this as another important consumer protection that should be part of the HHS minimum web-broker standards in § 155.220 that also extends to web-brokers in State Exchanges. Consistent with the proposals described above to extend the requirements at § 155.220(c)(3)(i)(A) and (G), we proposed to also extend the display obligations in § 155.220(c)(3)(i)(I) to apply to web-brokers in State Exchanges. As such, to prominently display this information, it must appear in a font size no smaller than the majority of text on the website page and must be noticeable in the context of the website by (for example) using a font color that contrasts with the background of the website page.[164] We similarly proposed to require web-brokers in State Exchanges to display information provided by, and as specified by, the State Exchange regarding a consumer's eligibility for APTC or CSRs. Additionally, we proposed flexibility in how consumer eligibility information for APTC or CSRs is displayed on websites by web-brokers in State Exchanges, at the direction of the State Exchange on the display of that information. This flexibility is intended to provide State Exchanges the ability to define how consumer education information about the State Exchanges, including the consumer eligibility information for APTC or CSRs, is customized and presented on their web-brokers' websites. For example, we recognize that State Exchanges may wish to require their web-brokers include additional consumer educational information or State-specific content to meet the needs of their consumers and applicants. We explained that we believe allowing the flexibility for State Exchanges and their web-brokers to customize the consumer eligibility information for APTC or CSRs that must be prominently displayed on the web-broker's non-Exchange website would provide a necessary baseline. More specifically, meeting these standards would provide consistency for all Exchange consumers receiving assistance from web-brokers through their non-Exchange websites and would ensure that all Exchange consumers are provided accurate and sufficient information on potential eligibility for APTC and CSRs and the potential liability for excess APTC repayment, whether they apply and enroll for coverage through the applicable Exchange's website or through a web-broker's non-Exchange website. We proposed to codify this State flexibility in new proposed paragraph (n)(1).

In the proposed rule (88 FR 82560 and 82561), we also proposed to add new § 155.220(c)(4)(iii) to extend certain downstream agent and broker requirements at § 155.220(c)(4)(i) that currently apply to web-brokers in FFE and SBE–FP States and govern the use of the web-broker's non-Exchange website by other agents or brokers assisting Exchange consumers to also apply to web-brokers, and their downstream agents and brokers, in States with State Exchanges, and consequently to these State Exchanges. Under the proposed new provision, web-brokers that permit other agents or brokers, through a contract or other arrangement, to use the web-broker's non-Exchange website to help an applicant or enrollee complete a QHP selection or complete the Exchange eligibility application would be required to meet the standards at § 155.220(c)(4)(i)(A), (B), (D), and (F) when assisting consumers in States with a State Exchange. To extend this framework to also apply in State Exchanges, we proposed to capture in new § 155.220(c)(4)(iii) that all references to ''HHS'' and ''Federally-facilitated Exchange'' in § 155.220(c)(4)(i)(A), (B), (D), and (F) would be understood to mean and be replaced with a reference to the applicable State Exchange.

The goal of the downstream agent and broker framework codified in § 155.220(c)(4)(i) is to ensure that agents or brokers who utilize a web-broker's non-Exchange website to help applicants complete a QHP selection or complete the Exchange eligibility application comply with necessary safeguards related to transparency, oversight, and consumer support. It ensures appropriate oversight by the web-broker and allows for closer monitoring by the applicable Exchange. In the proposed rule (88 FR 82561), we

[163] 81 FR 61499.

[164] See 78 FR 27260. Also see CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 4.4.1, p. 49–50 and Section 4.4.2, p. 54–55. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

explained that we believe the extension of the identified HHS minimum standards to State Exchanges and their web-brokers is especially important since some agents, brokers, and web-brokers operate in multiple States and would benefit from a standardized framework and set of requirements.

As part of the State Exchanges' oversight of the use of web-broker non-Exchange websites, we also encouraged State Exchanges to adopt a temporary suspension framework similar to § 155.220(c)(4)(ii) that applies in FFE and SBE–FP States. This provision permits HHS to temporarily suspend the ability of a web-broker to make its non-Exchange website available to its downstream agents and brokers to transact information with HHS if HHS discovers a security or privacy incident or breach. The suspension extends for the period in which HHS begins to conduct an investigation and until the incident or breach is remedied to HHS' satisfaction. It is another important feature of HHS' oversight of the use of web-broker non-Exchange websites in FFE and SBE–FP States that protects consumers data and safeguards Exchange operations and systems. State Exchanges that choose to permit web-brokers to host non-Exchange websites to assist consumers with QHP selections and submission of Exchange eligibility applications should consider adoption of similar measures.

In the proposed rule (88 FR 82561 and 82562), we proposed to add new paragraph (n)(2) to extend web-broker operational readiness requirements to State Exchanges and their web-brokers. Under this proposal, web-brokers operating in State Exchanges would be required to demonstrate operational readiness to the applicable State Exchange prior to the web-broker's website being used to complete an Exchange eligibility application or a QHP selection. The standards under § 155.220(c)(6) applicable to operational readiness reviews performed by HHS of web-brokers' non-Exchange websites used to assist the FFEs' and SBE–FPs' consumers to apply and enroll in QHP coverage through the Exchange, with or without APTC and CSRs, is a critical part of the oversight framework for HHS' Direct Enrollment (DE) program (including both Classic DE and Enhanced Direct Enrollment (EDE)).

In the 2018 Payment Notice final rule, we adopted rules to capture operational readiness requirements applicable to web-brokers that host non-Exchange websites to complete QHP selection.[165] In the 2020 Payment Notice final rule, we finalized amendments that moved the parallel operational readiness requirements for web-brokers and QHP issuers to § 155.221(b)(4), accounting for the fact that DE entities participating in EDE in the FFEs and SBE–FPs host the Eligibility application in addition to QHP selection.[166] In the 2022 Payment Notice final rule, we finalized amendments to codify more detail describing the operational readiness reviews applicable to web-brokers participating in FFE and SBE–FP States by adding a new § 155.220(c)(6).[167] We identified these operational readiness requirements as necessary safeguards to protect consumer data and the efficient and effective operation of the Exchange while also supporting innovation and the creation of additional approved pathways for FFE and SBE–FP consumers to enroll in QHP coverage in a manner that constitutes enrollment through the Exchange.

As part of the proposal to extend an operational readiness review requirement to State Exchanges and their web-brokers, we proposed in new paragraph (n)(2) to require these State Exchanges to establish the form and manner for their web-brokers to demonstrate operational readiness, which may include submission or completion of the same items addressed in § 155.220(c)(6)(i)–(v) to the State Exchanges, in the form and manner specified by the applicable State Exchanges. These standards, which apply in FFE and SBE–FP States, ensure operational readiness and compliance with all applicable requirements prior to the web-broker's non-Exchange website being used to complete Exchange eligibility application or a QHP selection. They make sure consumers and applicants are not able to enroll in Exchange coverage nor submit an Exchange application via a web-broker's non-Exchange website that is not operationally ready. Websites that have not been tested to see if they are operationally ready may not provide consumers and applicants with proper eligibility determinations or may have security flaws that could make a breach involving consumer PII more likely. Mandating that web-brokers participating in State Exchanges meet standards set by the applicable State Exchange to demonstrate operational readiness helps reduce this risk in all Exchanges. In the proposed rule (88 FR 82562), we encouraged State Exchanges to adopt operational readiness review standards consistent with the requirements captured in § 155.220(c)(6)(i)–(v) and to also consider leveraging the audits that web-brokers use to demonstrate compliance with the operational readiness review requirements applicable in FFE and SBE–FP States. Such an approach would promote standardization across Exchanges in terms of operational readiness requirements applicable for web-brokers while building in flexibility for State Exchanges. We explained that we recognize it is important to provide State Exchanges flexibility to tailor the operational readiness review process to best serve their operational and business needs. For example, State Exchanges may have the need to structure their operational readiness reviews to emphasize or prioritize different web-broker functionalities that meet State-specific needs and rules. Therefore, we proposed the requirement that State Exchanges must establish operational readiness requirements for their web-brokers to demonstrate compliance with applicable requirements and technological readiness prior to the web-broker's website being used to complete an Exchange eligibility application or a QHP selection, while providing these State Exchanges with flexibility to define the contours of those requirements. We proposed to capture at the end of the new paragraph (n) the accompanying proposed requirement that web-brokers in States with State Exchanges comply with the applicable State Exchanges' operational readiness standards under paragraph (n)(2).

Finally, in the proposed rule (88 FR 82562), we proposed in new paragraph (n)(1) to extend the current web-broker FFE standard of conduct established at § 155.220(j)(2)(i) to also apply to web-brokers assisting consumers in State Exchanges, and consequently to these State Exchanges. This FFE standard already extends to web-brokers assisting consumers in SBE–FP States.[168] As proposed to be applied in State Exchanges, web-brokers would be required to provide consumers with correct information, without omission of material fact, regarding the applicable State Exchange, QHPs offered through the applicable State Exchange, and insurance affordability programs.[169] In addition, web-brokers who assist with

[165] 81 FR 94120.

[166] 84 FR 17522 through 17525.

[167] 86 FR 24208 through 24209.

[168] See 45 CFR 155.220(l). A parallel requirement also applies to QHP issuer DE entities in FFE and SBE–FP States. See 45 CFR 155.221(a)(1) and (i), and 156.1230(b)(2). As discussed below, in this rulemaking, we proposed and are finalizing the extension of the parallel QHP issuer DE entity requirement to State Exchanges and their QHP issuer DE entities.

[169] See 42 CFR 435.4 for the definition of insurance affordability programs.

or facilitate enrollment of qualified individuals, qualified employers, or qualified employees, in coverage in a manner that constitutes enrollment through a State Exchange, or assist individuals in applying for APTC and CSRs for QHPs sold through a State Exchange, would also be required to refrain from marketing or conduct that is misleading (including by having a website that the State Exchange determines could mislead a consumer into believing they are visiting the State Exchange's website), coercive, or discriminates based on race, color, national origin, disability, age, or sex. To extend this FFE standard of conduct to State Exchanges, we proposed in the last sentence of new paragraph (n) that all references to ''HHS'' and ''the Federally-facilitated Exchanges'' in § 155.220(j)(2)(i) would be understood to mean and be replaced with a reference to ''the applicable State Exchange, applied to web-brokers,'' and the reference to ''*HealthCare.gov*'' in § 155.220(j)(2)(i) would be understood to mean and be replaced with a reference to ''the State Exchange website, applied to web-brokers.''

We sought comment on these proposals, especially from States operating, or seeking to operate, State Exchanges. We also sought comment on which of the other current provisions at § 155.220 should or should not apply to State Exchanges and web-brokers that assist consumers in State Exchanges.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these proposals without modification. Below, we summarize and respond to public comments received on the proposals to require web-brokers operating in State Exchanges meet certain HHS standards applicable in the FFEs and SBE–FPs.

Comment: Most commenters were broadly supportive of these proposals. Several commenters specifically cited that the provisions extending web-broker website display of standardized QHP comparative information, disclaimer language, information on eligibility for APTC/CSRs, operational readiness, standards of conduct, and access by web-broker downstream agents and brokers across all Exchange types are all important consumer safeguards. Several commenters stated these provisions would generally enhance the consumer shopping experience, by providing consumers with a higher-quality and more consistent user experience that allows them access to accurate information about coverage and insurance affordability programs, whether they utilize the Exchange's website or web-brokers' non-Exchange websites.

A few commenters stated that if State Exchanges leveraged, where appropriate, HHS operational readiness reviews conducted for FFE and SBE–FP web-brokers, this may both help to alleviate the compliance burden on web-brokers participating in State Exchanges and on those State Exchanges, which would help increase the likelihood of web-broker participation in State Exchanges. One commenter further expanded on this, stating that the proposals to encourage streamlined operational readiness and compliance activities across State Exchanges via States leveraging HHS operational readiness reviews and artifacts (that is, findings) for web-brokers will make it easier for a web-broker to participate in multiple State Exchanges.

A few commenters expressed appreciation that the proposals afford State Exchanges sufficient flexibility, such as the ability to implement State-specific operational readiness assessments or to incorporate State-specific information into the standardized disclaimers.

Response: We appreciate and agree with these comments, many of which summarized or elaborated on these proposals' benefits that we described in the proposed rule.

Comment: Several commenters that expressed general support for these proposals also suggested that CMS should consider requiring web-brokers to implement additional consumer protection standards and other consumer-oriented tools and information on their websites in the future, citing that it is especially important that web-brokers provide streamlined and approved information on State Exchange coverage on their websites. These commenters, however, did not identify which additional standards in § 155.220 we should consider requiring web-brokers participating in State Exchange to meet for future benefit years nor did the commenters otherwise offer specific suggestions for other standards, tools, or information, that should similarly be considered for implementation in the future.

Response: We appreciate commenters' feedback and agree that adoption of consumer protection standards applicable to the use of web-broker non-Exchange websites to enroll consumers in QHPs and help consumers apply for APTC/CSRs via State Exchanges is important. As we explained in the proposed rule (88 FR 82557 and 82558), section 1312(e) of the ACA provides that the HHS shall establish procedures under which a State may allow agents, brokers, and web-brokers to enroll individuals in QHPs offered through Exchanges. In the proposed rule, we sought comment on which of the current provisions at § 155.220 should or should not apply to State Exchanges and web-brokers that assist consumers in State Exchanges, and we continue to encourage specific feedback from interested parties on additional consumer protection standards, consumer-orientated tools, or information that we should consider adopting in the future, particularly from State Exchanges and web-brokers operating in Exchanges.

Comment: One commenter suggested that if State Exchanges wish to adopt standards for web-brokers that are different from the minimum HHS standards that HHS proposed to extend to web-brokers assisting consumers in State Exchanges and, consequently, those State Exchanges, HHS should establish a process to allow States to apply standards that are different from the HHS default minimum standards. This commenter noted the HHS standards are a reasonable starting point, but that States should have the flexibility to enforce their own standards.

Response: We appreciate the commenter's recommendation that State Exchanges should have the flexibility to establish and enforce their own standards for web-brokers. As explained in the proposed rule (88 FR 82557), the HHS standards we are finalizing as applicable to State Exchanges and their web-brokers are intended to serve as a starting point by extending certain baseline critical protections to consumers in all Exchanges. These standards focus on ensuring proper eligibility determinations, protecting against security breaches or incidents through implementation of operational readiness reviews, and minimizing consumer confusion. State Exchanges can establish additional standards for web-brokers that are more stringent than the HHS standards, as long as any standard established by the State for its web-brokers does not prevent, or conflict with, the application of the HHS standards [170] applicable to web-brokers operating in State Exchanges. For example, while a State Exchange could not forego requiring their web-brokers to participate in operational readiness activities, as required under new § 155.220(n)(2), a State Exchange may establish the form and manner for their web-brokers to demonstrate

[170] See section 1311(k) of the ACA.

operational readiness, including requiring their web-brokers to submit documentation the State Exchange believes would support its evaluation of a web-broker's operational readiness. If a State Exchange wants to replace an otherwise applicable HHS standard with an alternative State standard for its web-brokers, the State can consider using the existing process under section 1332 of the ACA to pursue such change, provided the State is able to do so in accordance with section 1332 requirements. Section 1332 of the ACA permits States to apply for a waiver from certain ACA requirements [171] to implement innovative and individualized State strategies to provide State residents with access to high quality, affordable health insurance coverage. Section 1312(e) of the ACA is among the provisions that a State can seek to waive under section 1332 of the ACA.[172] Therefore, a State with a State Exchange that wants to amend the new HHS minimum standards under § 155.220 applicable to its web-brokers and replace it with an alternative State standard can apply for a section 1332 waiver to pursue such a change. For a section 1332 waiver to be approved, the Departments must determine that the waiver meets certain statutory guardrails [173] and other applicable requirements.[174] For more information on the process to submit section 1332 waiver applications, see *https://www.cms.gov/marketplace/states/section-1332-state-innovation-waivers.* In addition, as outlined above, the framework adopted in this final rule as applicable to State Exchanges and their web-brokers incorporates certain flexibilities for State Exchanges. For example, State Exchanges may add State-specific information to the standardized disclaimers required to be displayed by their web-brokers. As another example, State Exchanges may specify the form and manner for their web-brokers to demonstrate operational readiness prior to the web-broker's internet website being used to complete an Exchange eligibility application or a QHP selection.

Finally, to the extent that a State Exchange permits web-brokers to assist its consumers, the State Exchange will remain the entity with primary responsibility for oversight and enforcement of applicable standards.

Comment: A few supporting commenters requested that HHS share information on how the Department would track compliance by State Exchange web-brokers with the HHS minimum standards.

Response: An Exchange is the primary entity responsible for overseeing and ensuring compliance by their web-brokers with applicable Federal and State rules and regulations, while HHS has the authority to oversee the implementation and operation of Exchanges, including optional web-broker programs that a State Exchange may elect to operate, and Exchange compliance with Federal requirements. For new State Exchanges, under § 155.105, States that seek to operate a State Exchange must complete and submit an Exchange Blueprint application. The Exchange Blueprint application documents that an Exchange will meet the legal and operational readiness requirements required of a State Exchange. As part of a State's Blueprint submission, the State also agrees to demonstrate operational readiness to implement and execute the Federal requirements applicable to State Exchanges, which would include the new requirements under § 155.220 applicable to State Exchange that elect to implement a web-broker program. A State Exchange that elects to operate an optional web-broker program would be required to include information in its Blueprint to demonstrate operational readiness to implement and support ongoing operations of an optional web-broker program consistent with applicable requirements in § 155.220. As discussed in other sections of this rule, we are also codifying requirements related to the approval of a State Exchange whereby we will require a State seeking to establish a State Exchange to provide supplemental information in its Blueprint application to demonstrate its ability to implement and comply with the requirements for operating a State Exchange, including requirements associated with the operation of a web-broker program. Such supporting information would inform HHS's decision to approve or conditionally approve a State Exchange and would help facilitate HHS' oversight of compliance with Federal requirements applicable to State Exchanges and their web-brokers.

Additionally, under § 155.105, an existing State Exchange must notify HHS in writing before making a significant change to its approved Exchange Blueprint, and no significant change to an Exchange Blueprint may be effective until it is approved by HHS in writing or 60 days after HHS receipt of a completed request. Accordingly, for existing State Exchanges that seek to newly implement and operate an optional web-broker program, we would require the State to submit an updated Exchange Blueprint and participate in operational readiness reviews related to the implementation and ongoing operation of such a web-broker program because we would consider a State Exchange implementing a web-broker program to be a significant change. Once implemented, for a State Exchange operating a web-broker program, HHS would monitor the operations of a State Exchange through the annual reporting by State Exchanges related to compliance with Federal requirements, consistent with our oversight authority at § 155.1200(b)(2). Specifically, HHS would use this oversight authority to evaluate State Exchange compliance with the policies we are finalizing at § 155.220 for those State Exchanges that elect to operate a web-broker program, as HHS does with other aspects of State Exchange operations on an annual basis. If there is information suggesting a State Exchange or one of its web-brokers does not meet the requirements of the policies we are finalizing at § 155.220, we would notify the State Exchange and give them an opportunity to address the potential non-compliance. We will consider the development of new, additional tools to assist with oversight that could enhance transparency into compliance by State Exchanges, including their web-broker programs, with applicable Federal requirements. We may also consider use of other oversight tools and authority, including those under Part 155 of our regulations, as appropriate.

Comment: A few commenters who opposed the proposals broadly stated that State Exchanges should maintain their current flexibility for establishing rules governing their web-broker programs, given that State Exchanges understand their markets best. One of these commenters further stated that the

[171] The following provisions can be waived under section 1332 of the ACA: (1) Part I of subtitle D of Title I of the ACA (relating to the establishment of QHPs); (2) Part II of subtitle D of Title I of the ACA (relating to consumer choices and insurance competition through Health Benefit Exchanges); (3) Section 1402 of the ACA (relating to reduced cost sharing for individuals enrolling in QHPs); and (4) Sections 36B (relating to refundable credits for coverage under a QHP), 4980H (relating to shared responsibility for employers regarding health care coverage), and 5000A (relating to the requirement to maintain minimum essential coverage) of the Internal Revenue Code (Code)

[172] See section 1332(a)(2)(B) of the ACA.

[173] In order for a section 1332 waiver to be approved, the Departments must determine that the waiver meets the guardrails such that the waiver will provide coverage that is at least as comprehensive as the coverage provided without the waiver; provide coverage and cost-sharing protections against excessive out-of-pocket spending that are at least as affordable as without the waiver; provide coverage to at least a comparable number of residents as without the waiver; and not increase the Federal deficit. See section 1332(b)(1)(A)–(D) of the ACA.

[174] See 45 CFR 155.1300–155.1332 and 31 CFR 33.100–33.132.

proposals may hinder web-broker creativity with how web-brokers display information on their non-Exchange websites in States with State Exchanges, but the commenter did not offer more specific feedback to explain how the proposal would hinder creativity or innovation by web-brokers. Another opposing commenter generally stated that HHS should focus on developing regulations that encourage web-broker participation in the Exchanges. One commenter who broadly supported the goals of the proposals stated that while measures should be taken in State Exchanges with regard to web-broker operations to incorporate necessary consumer safeguards, HHS should provide State Exchanges flexibility in identifying how to implement such safeguards.

Response: We agree that States and State Exchanges understand their market dynamics best, and as such, our goal with these proposals was to identify the subset of existing HHS minimum standards that should apply across all Exchanges to provide baseline consumer protections while also maximizing opportunities for State Exchange flexibility and encouraging broad web-broker participation. For example, while we are requiring that web-brokers in State Exchanges display specific disclaimers to provide consumers with clear and consistent information, we also are providing flexibility for State Exchanges to incorporate State-specific information into these website disclaimers, provided the additional language does not conflict with the HHS-provided standardized disclaimer. These disclaimers provide standardized information to consumers on important topics, such as the consumer's eligibility for APTC/CSRs and limitations on the choice of QHPs that consumers may enroll in on a web-broker's non-Exchange website.

We do not believe that the requirement for web-brokers to display such disclaimers should hinder web-broker participation, particularly since all web-brokers participating in a particular State Exchange will need to display the same disclaimers and will need to display similar disclaimers across all Exchanges. As another example, while we are requiring that web-brokers in State Exchanges demonstrate operational readiness to the applicable State Exchange, we are also providing State Exchanges flexibility in how they establish their operational readiness requirements and assessment process, while at the same time encouraging State Exchanges to leverage HHS operational readiness activities for web-brokers participating in FFE and SBE–FPs where appropriate.

We believe that the application of these HHS minimum standards across all Exchanges will encourage web-broker participation, as State Exchanges implementing operational readiness requirements for web-brokers that align with the HHS framework would facilitate web-broker participation across multiple State Exchanges leveraging the same standards. While the HHS minimum standards we are finalizing as applicable to State Exchanges and their web-brokers provides a common set of baseline requirements, the framework adopted in this rule also provides State Exchanges flexibility to implement additional web-broker requirements based on the specific needs of their markets.

Additionally, we disagree that the HHS minimum standards we are extending to State Exchanges and their web-brokers will hinder creativity with respect to how web-brokers participating in State Exchanges display information on their non-Exchange websites. While these proposals represent a minimum set of standards for how information is presented on web-broker non-Exchange websites across all Exchanges, the standards are not prescriptive concerning how web-brokers can further customize their websites to better appeal to and serve consumers. For example, some web-brokers assisting consumers in the FFEs and SBE–FPs have implemented additional website functionalities that do not conflict with the minimum set of HHS standards concerning how information must be presented on web-broker websites, such as novel plan recommendation algorithms, affordability estimates, and plan filters.

8. Establishing Requirements for DE Entities Mandating *HealthCare.gov* Changes Be Reflected on DE Entity Non-Exchange Websites Within a Notice Period Set by HHS (§ 155.221(b))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82562), we proposed to revise § 155.221(b) to require that *HealthCare.gov* changes be reflected and prominently displayed on DE entity non-Exchange websites assisting consumers in FFEs and SBE–FPs within a specific notice period [175] set by HHS. We explained that we conduct various DE entity monitoring programs, including website display reviews, and routinely identify areas where DE entity non-Exchange websites can improve the user experience and more closely align with *HealthCare.gov.* The changes that we proposed to require DE entities to make to their non-Exchange websites included changes that enhance the consumer experience, simplify the plan selection process, and increase consumer understanding of plan benefits, cost-sharing responsibilities, and eligibility for financial assistance. This proposal would codify our existing practice of communicating important changes to the *HealthCare.gov* display to EDE entities to ensure their EDE websites conform to those changes and provide the same vital information to consumers, expand our existing change requests processes to permit entities to request deviations from required display changes, require DE entities that do not participate in EDE to comply with this practice, and require State Exchanges that choose to implement a DE program to require their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made to the State Exchanges' websites on their non-Exchange websites for purposes of assisting consumers with DE in QHPs offered through the Exchange in a manner that constitutes enrollment through the Exchange.

The display requirements for DE entity non-Exchange websites are captured in §§ 155.220, 155.221, 156.265, and 156.1230. The website display requirements are often technical in nature and can require subsequent release of guidance to provide technical and operational details to support their implementation. When HHS makes changes to the *HealthCare.gov* display, we notify EDE entities assisting consumers in the FFEs and SBE–FPs of these changes and require that they make them to their non-Exchange websites via the HHS-initiated change request process outlined in the Third-Party Auditor Operational Readiness Reviews for the Enhanced Direct Enrollment Pathway and Related Oversight Requirements guidance document referred to as the ''Third-Party Auditor Guidelines.'' [176] This process helps ensure consumers receive vital information they need in a timely fashion. We refer readers to the 2025 Payment Notice proposed rule (88 FR

[175] ''Notice period'' refers to the time period that DE entities have to reflect and prominently display *HealthCare.gov* changes communicated to them by HHS pursuant to this proposal.

[176] CMS. (2023, March 1). *Third-party Auditor Operational Readiness Reviews for the Enhanced Direct Enrollment Pathway and Related Oversight Requirements.* CMS. Section IX.B., pp. 72–74. *https://www.cms.gov/files/document/guidelines-enhanced-direct-enrollment-audits-year-6-final.pdf.*

82563) for further discussion of the background for this proposal.

As stated in the proposed rule (88 FR 82563), this proposal codifies and expands this existing, HHS-initiated change request practice for EDE entities non-Exchange websites and supports consistency as to the timing of display changes across enrollment platforms, which will help ensure all Exchange consumers have timely access to accurate, clear information as they navigate the QHP selection and enrollment processes. Most DE partners in FFE and SBE–FP States participate in EDE and therefore are already familiar with and complying with this proposal because it is part of the existing requirements, as outlined in the Third-Party Auditor Guidelines. However, this will be new for some DE partners, such as those that only participate in Classic DE, because they are not currently subject to these requirements, which currently only apply to DE entities that participate in EDE in FFE and SBE–FP States. It is especially important that changes to the *HealthCare.gov* display are reflected on non-Exchange websites, including websites used for both Classic DE and EDE, as a steadily increasing number of the FFEs' and SBE–FPs' consumers enroll in Exchange plans via these DE pathways. This proposal will help ensure consumers using these DE pathways benefit from the policies we introduce to improve the *HealthCare.gov* website display by enhancing the consumer experience, increasing consumer understanding, and simplifying the plan selection process.

We recognize that the technical details necessary to implement website display changes must be communicated to DE entities with sufficient notice for development prior to implementation. As such, we proposed that HHS would provide DE entities with advance notice to give them time to implement the changes on their non-Exchange websites. We explained that we intend for the duration of the advance notice period to correspond to the complexity of the change and the urgency with which the change must be reflected on the DE entity's non-Exchange website (that is, we intend to provide a longer advance notice period for implementation of changes requiring more complex website-development work, or for lower-urgency changes). We explained that we would categorize display changes as simpler versus more complex based on a combination of factors, including, but not limited to, consideration of the following: number of website pages affected; number of data fields affected; nature of the change (that is, text-based versus data-based); whether the change is static or dynamic based on user input; whether the change updates QHP data provided by us [177] or involves the display of new data not previously provided by us (that is, new data types would be considered a more complex change due to the web-development work required to integrate a new PUF data field or MAPI data variable); and whether the change may affect backend algorithms for plan sorting, filtering, or recommendations. The complexity of the change would be the primary factor determining the length of the advance notice period. Generally, we would expect to provide approximately 30 calendar days' advance notice of simpler display changes and up to 90 or more calendar days' advance notice for more complex changes. However, in situations where we have determined that it is urgent that *HealthCare.gov* display changes are similarly made to DE entities' non-Exchange websites to communicate necessary information to consumers regarding their plan selection or enrollment, we explained that we may provide fewer than 30 days' advance notice, but not less than 5 business days' advance notice. When considering the urgency of a display change, we further explained that we would consider a number of factors, including, but not limited to, the following: potential to impact consumers' understanding of plan benefits and cost-sharing responsibilities; potential for consumers to receive an incorrect eligibility determination; potential impact to the consumer's understanding of their eligibility for financial assistance (that is, APTC or CSR); proximity to the Open Enrollment period (with changes becoming more urgent as Open Enrollment nears, as implementing changes prior to Open Enrollment is critical for ensuring the greatest number of consumers are able to benefit from the changes); and whether failure to implement the change may result in a display that is misleading or confusing to consumers.

We proposed to amend § 155.221 to add new paragraph (b)(6), which would require DE entities in FFE States to implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. Consistent with § 155.221(i), this new DE entity non-Exchange website display requirement would also apply to DE entities that enroll qualified individuals in coverage in a manner that constitutes enrollment through an SBE–FP or assist individual market consumers with submission of applications for APTC and CSRs through an SBE–FP.

We are cognizant of, and support, DE entity non-Exchange websites' use of innovative decision-support tools and user interface design to help consumers shop for and select QHPs that best meet their needs. This proposal is not intended to prohibit or otherwise stand in the way of DE entities' development of such tools and consumer interfaces. Consistent with the existing approach for implementation of HHS-initiated changes described in the Third-Party Auditor Guidelines, we explained that we would implement this requirement with a focus on requiring DE entities in FFE and SBE–FP States to mirror any display changes made to *HealthCare.gov* that impact a consumer's understanding of plan benefits, cost-sharing responsibilities, and eligibility for financial assistance. For each required change, DE entities in FFE and SBE–FP States would need to implement on their non-Exchange websites conforming display changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards defined by HHS. We explained that we would provide DE entities flexibility in their user interface graphic design, provided that their design complies with the standards defined by HHS in the notification of required change(s). As part of this proposal, we would require that all front-end website changes (that is, website changes that would affect the visual aspects of the website that users see and interact with) be prominently displayed on DE entity non-Exchange websites. As used in this context, ''prominently displayed'' means that text must be written in a font size no smaller than the majority of the text on the web page, text must be displayed in the same non-English language as any language(s) the DE entity maintains translations for on its website,[178] and any display changes must be noticeable in the context of the website (that is, DE entity non-Exchange websites must use

[177] We provide DE entities with the QHP comparative information that must be displayed in accordance with § 155.220(c)(3)(i)(A) and § 156.1230(a)(1)(ii). We provide this data via the Public Use Files (PUF) (*https://www.cms.gov/cciio/resources/data-resources/marketplace-puf*) and through non-Exchange website integration with the Marketplace Application Program Interface (MAPI) (*https://developer.cms.gov/marketplace-api/*). In this context, website integration refers to connecting the non-Exchange website with Exchange data by using the MAPI.

[178] 45 CFR 155.205(c)(2)(iv).

a font or graphic color that contrasts with the background of the web page and ensure any graphics and iconography that they are required to display are readable without requiring the user to increase their magnification percentage greater than 100 percent). The DE entity may change the font color, size, or graphic context of the information to ensure that it is noticeable to the user in the context of its website or other written material.

For example, in a scenario where *HealthCare.gov* is updated to display new help text communicating educational content to consumers that is designed to help a consumer better understand plan benefits, cost-sharing responsibility, or eligibility for financial assistance, we would require the DE entity's non-Exchange website to display that help text or similar text. When notifying DE entities about the required change, we would establish and communicate the standards that must be met for display of the required change, such as the new help text that must be prominently displayed on their websites. If the standards allow the DE entity to display similar text to the language used on *HealthCare.gov* (for example, when information must be communicated but there is a low risk of misinterpretation of the information such that we will not require DE entities to display the exact language used on *HealthCare.gov*), we would provide DE entities with information on how the help text is displayed on *HealthCare.gov,* along with the standards that must be met, while also outlining the flexibility for DE entities to adapt the language to reflect their own entity branding if it generally conveys the same information and meaning as the help text displayed on *HealthCare.gov.* In this example, we would also allow flexibility as to the location of the help text if it adheres to the prominent display requirements discussed earlier in this proposal. In this scenario, DE entities would be able to adjust the language and decide on the location of the help text on the QHP selection page(s) without seeking prior approval from HHS. However, we would monitor implementation through existing periodic website review monitoring per § 155.220(c)(5) and, as described in the Third-Party Auditor Guidelines,[179] may notify the DE entity if we find that their language does not convey the same meaning as the help text displayed on *HealthCare.gov* or if we find the help text is not prominently displayed. Such notification would occur via a letter that would provide the DE entity with feedback explaining the noncompliance and required corrective actions (such letter is referred to as ''Technical Assistance''). If Technical Assistance fails, we may potentially take enforcement action to address the identified instances of non-compliance, which could include temporarily suspending the DE entity's ability to transact information with the Exchange if we discover circumstances that pose unacceptable risk to eligibility determination, Exchange operations, or Exchange systems, if warranted.[180]

Additionally, we explained that we recognize that some DE entities may have system constraints that prevent them from precisely mirroring the *HealthCare.gov* display approach, and so we proposed that if a DE entity is unable to implement the standards defined by HHS, or the DE entity has an idea for implementation that does not meet the standards but would effectively communicate the same information to consumers, we may permit a deviation. We proposed that DE entities that are interested in pursuing a deviation must submit deviation requests to HHS and proposed that such requests would be subject to review by HHS in advance of implementation of any alternative display approaches. We explained that deviation requests must include a proposed alternative display and accompanying rationale. The rationale must explain why the DE entity is unable to implement the standards or how the DE entity's idea for implementation that does not meet the HHS standards would effectively communicate the same information to consumers. Therefore, similar to the differential website display requirements for standardized plans applicable to web-broker and QHP issuer DE entities at §§ 155.220(c)(3)(i)(H) and 156.265(b)(3)(iv) and the HHS-initiated change request process, we proposed to allow DE entities to request a deviation from the standards communicated by HHS for required display changes to align with *HealthCare.gov* by submitting a proposed alternative display and accompanying rationale or explanation for why a deviation is necessary. In reviewing deviation requests, HHS would consider whether the same level of differentiation and clarity is being provided under the deviation requested by the DE entity as is provided on *HealthCare.gov.* Other factors and criteria HHS would consider include, but are not limited to, whether the proposed alternative website display adheres to the standards for prominent display described in this proposal and whether the display provides correct information, without omission of material fact, that does not have the potential to be misleading to consumers.

Under the proposed approach, the deviation request would have to be submitted and approved by HHS before DE entities would be permitted to implement any alternative website displays. Deviation requests would not toll the advance notice period. This deviation request process is separate and distinct from the flexibilities in user interface graphic design that we would allow without preapproval as long as the design and display otherwise meets the applicable standards defined and communicated by HHS for the display change. DE entities would only need to request a deviation from the requirements of the standards communicated by HHS if the DE entity seeks to deviate from those standards or specifications when it implements a display change to its Non-Exchange website that is required by HHS pursuant to this proposal.

We also proposed in new § 155.221(j)(3) to extend this new proposed DE entity non-Exchange website display requirement to require State Exchanges that choose to implement a DE program to require their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made by State Exchanges to the State Exchanges' website on their non-Exchange websites. We believe it is necessary for consumers utilizing DE entities in States with State Exchanges to have access to the same vital information pertaining to their plan selection and enrollment process as they would have if they were enrolling via the State Exchanges' websites. Under this proposal, we would require State Exchanges to establish and communicate standards for required display changes and to set the time period within which display changes must be implemented on DE entities' non-Exchange websites. State Exchanges would also be required to review deviation requests submitted by DE entities and establish their own deviation request process should the State Exchange elect to permit deviation requests. DE entities are required to follow the process established by the State Exchange. We would provide flexibility for State Exchanges to develop their own process for

[179] CMS. (2023, March 1). *Third-party Auditor Operational Readiness Reviews for the Enhanced Direct Enrollment Pathway and Related Oversight Requirements.* CMS. Section X.F., p. 69. *https://www.cms.gov/files/document/guidelines-enhanced-direct-enrollment-audits-year-6-final.pdf.*

[180] 45 CFR 155.221(e).

communicating those standards, setting advance notice periods, and establishing a deviation request process as needed to meet the business needs of the State Exchange. We would encourage State Exchanges that choose to implement a DE program to consider the same factors described above (that is, urgency and complexity of the change) when determining the advance notice period. Similarly, we would encourage State Exchanges to provide their DE entities with examples of the State Exchange website display change and technical assistance, including technical implementation guidance, to ease the burden of implementing and prominently displaying required changes. We would require State Exchanges to apply HHS's standard for ''prominently display,'' explained earlier in this section of this final rule, to help ensure that important enrollment, eligibility, and other information is as noticeable and clear to consumers using DE entities' websites in State Exchanges as it is to consumers using State Exchange websites or *HealthCare.gov,* which we believe will enhance the user experience, increase understanding, and simplify the plan selection process for all consumers.

As part of this proposal to extend the requirement for DE entities to reflect Exchange website changes on their non-Exchange websites to State Exchanges and their DE entities, we would rely on State Exchanges that choose to implement a DE program to enforce compliance with these requirements and take enforcement action when their DE entities fail to comply and update their non-Exchange websites to mirror changes made to the State Exchange website. We would be available to provide technical assistance to support the State Exchanges' efforts to take appropriate enforcement action as needed to ensure compliance with applicable requirements. There may exist scenarios where the website display requirements may differ between the FFEs or SBE–FPs versus the State Exchanges (for example, in scenarios where a State Exchange uses the *HealthCare.gov* disclaimer language and adds State-specific information such as replacing a *HealthCare.gov* hyperlink with the State Exchange hyperlink). In such scenarios, DE entities would be required to tailor their non-Exchange website display to the requirements of the Exchange through which the consumer is seeking assistance. Based on our experience providing oversight of DE entity website displays in FFE and SBE–FP States, we understand that many DE entities are familiar with and have the capability to tailor website displays based on different scenarios and, as such, we anticipate DE entities will have the capability to tailor website displays to mirror the website of the Exchange the consumer is shopping for coverage in.

With an increasing number of consumers utilizing the DE pathways to enroll in coverage through the Exchanges, we believe it is important to codify a requirement to mandate changes made to *HealthCare.gov* (or for State Exchanges, the State Exchanges' websites) be implemented on DE entity non-Exchange websites within a timeframe specified by HHS (or, for DE entities assisting consumers in State Exchanges, within a timeframe specified by the State Exchange). These proposals would ensure consumers using DE entity non-Exchange websites have a similar user experience, with access to the same information in a similar manner as provided on *HealthCare.gov* and State Exchange websites.

We sought comment on all aspects of these proposals.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these proposals without modification but with technical changes to the regulatory text. These changes clarify that DE entities in States with State Exchanges must implement and prominently display website changes in a manner consistent with display changes made to the State Exchange website, unless the State Exchange approves a deviation from those standards under the deviation request process that the State Exchange is required to establish, should the State Exchange elect to permit deviation requests. We acknowledge that the language in the proposed rule, including its regulatory text, may have been confusing and subject to different interpretations, and accordingly, we clarify our intent and the regulatory text in this final rule. The approach, as clarified by these technical changes, is consistent with the proposal as discussed in the preamble to the proposed rule (88 FR 82565), which stated that the State Exchange would be required to establish a deviation request process and review deviation requests submitted by DE entities, should the State Exchange want to permit deviations. The commenters appear to have interpreted the proposed rule consistent with these technical changes, with one commenter specifically suggesting HHS encourage State Exchanges to consider deviation requests. For clarity, we also are making technical changes to the regulatory text at § 155.221(j)(3), which stated in the proposed rule (88 FR 82651) that State Exchanges must require their direct enrollment entities to implement and prominently display ''changes adopted for display on the State Exchanges' websites.'' The revised regulatory text now states that State Exchanges must require their DE entities to implement and prominently display ''website changes in a manner that is consistent with the display changes made by State Exchanges to the State Exchanges' websites.'' This technical change aligns the regulatory text of § 155.221(j)(3) with paragraph (b)(6) but does not represent a change in the policy discussed in the proposed rule (88 FR 82565).

We summarize and respond below to public comments received on the proposed requirement that *HealthCare.gov* or State Exchange website changes be reflected and prominently displayed on DE entity non-Exchange websites within a specific notice period set by HHS or the State Exchange.

Comment: Most commenters who addressed these proposals supported their adoption as proposed, stating benefits such as enhanced consumer protection, accuracy, efficiency, and consistency across Exchanges. One commenter noted these changes will also establish consistency between Classic DE and EDE websites in FFE and SBE–FP States. A few commenters noted these proposals expand HHS' existing practice of ensuring adequate communication of *HealthCare.gov* changes to consumers across platforms and Exchange types. One commenter stated these proposals will limit consumer confusion or consumer action based on ''outdated eligibility or plan availability information.'' A few commenters recommended that web-brokers be required to display all plan information in a manner that exactly replicates the *HealthCare.gov* or State Exchange website display. One commenter emphasized that providing DE entities with technical and operational assistance is vital for ensuring changes are executed correctly and effectively. One commenter opposed these proposals, stating that it diminishes the value of DE and contradicts the ability for DE entities to tailor their experience to best suit consumers.

Response: We appreciate the comments in support of these requirements and agree they will ultimately minimize consumer confusion, support consistency across Exchanges, and promote increased consumer understanding by mandating

that DE entity non-Exchange websites reflect and prominently display changes made to the applicable Exchange's website within the notice period set by HHS or the State Exchange, as applicable. As described above and in the proposed rule (88 FR 82563 through 82565), we agree that this approach will codify our existing HHS-initiated change request practices for communicating *HealthCare.gov* changes to EDE partners and expand it to apply across all DE non-Exchange websites in FFE and SBE–FP States for both Classic DE and EDE.

We agree this policy may limit consumer confusion or consumer action based on outdated eligibility or plan information insofar as this policy requires DE entities to reflect and prominently display changes that increase consumer understanding of eligibility for financial assistance or plan information on their non-Exchange websites (for example, making plan information—or a link to it—more conspicuous on a web page). We note that this policy does not impact existing requirements for web-broker websites used to complete QHP selection in FFE and SBE–FP States [181] to provide consumers the ability to view all QHPs offered through the Exchange.[182] This policy also does not impact existing requirements for web-broker websites used to complete QHP selection in FFE and SBE–FP States to display QHP information and information pertaining to a consumer's eligibility for APTC or CSRs under §§ 155.220(c)(3)(i)(A) and (I), which also extends to web-brokers assisting consumers in State Exchanges under new § 155.220(n). We note that under § 155.221(a)(2), these requirements also apply to DE entity non-Exchange websites in the FFEs and SBE–FPs [183] to the extent those DE entities are web-brokers, and under proposed § 155.220(n), these requirements would apply to DE entity non-Exchange websites operating in State Exchanges to the extent those DE entities are web-brokers.

We appreciate the emphasis on the need for HHS to provide technical and operational assistance and are committed to providing such assistance to ensure DE entities in the FFEs and SBE–FPs have the tools and information required to implement the required display changes accurately and efficiently. We encourage State Exchanges that choose to implement DE programs to provide similar support to their DE entities.

We acknowledge the comments requesting that web-brokers be required to exactly replicate the *HealthCare.gov* or State Exchange website display. However, we did not propose nor are we finalizing such a requirement.[184] As described above and in the proposed rule (88 FR 82564), we support DE entity non-Exchange websites' use of innovative decision-support tools and user interface design, and we believe that requiring an exact replication of *HealthCare.gov* or State Exchange websites would hinder such innovation. We believe the approach we are adopting, including permitting flexibility in DE entity non-Exchange website user interface graphic design [185] when implementing required *HealthCare.gov* or State Exchange website display changes and the deviation requests process,[186] will allow DE entities sufficient flexibility to integrate required changes within the context of their non-Exchange website. The approach will simultaneously provide necessary consumer protections by requiring the DE entity's user interface design to comply with the standards defined by HHS or the State Exchange or, in the case of deviation requests submitted to HHS, by requiring HHS to consider whether the same level of differentiation and clarity is provided under the deviation requested by the DE entity as is provided on *HealthCare.gov* when considering deviation requests. We encourage State Exchanges to establish a deviation request process, and we expect that State Exchanges will consider the business needs of their Exchange and the interests of consumers in their State, including consumer protection, when they review deviation requests, should the State Exchange elect to permit deviation requests.

We do not agree with the commenter that suggested these requirements diminish the value of DE or contradict the ability for DE entities to tailor their experience to best suit consumers. As discussed previously in this section of this final rule, these requirements support flexibility in the implementation of required changes by DE entities. They are not intended to impair DE entities' ability to tailor their user interface design. For example, DE entities are allowed to make changes to the font color, size, or graphic context of the information to ensure that it is noticeable in the context of its website. Rather, they establish a pathway for DE entities to innovate while ensuring that DE entity non-Exchange websites provide the same level of differentiation and clarification for consumers as is provided on *HealthCare.gov* or a State Exchange's website. We continue to believe that, as explained in the proposed rule (88 FR 82563), these requirements will help ensure all Exchange consumers have timely access to accurate, clear information as they navigate the QHP selection and enrollment processes. As a result, we expect they will help make DE an

[181] See § 155.220(l).

[182] See § 155.220(c)(3)(i)(B).

[183] See § 155.221(i).

[184] We note that under § 155.220(c)(3)(i)(A), (B) and (D) web-brokers operating in FFEs are required to disclose and display QHP information provided by the Exchange or directly by QHP issuers consistent with the requirements of § 155.205(c), and to the extent that enrollment support for a QHP is not available using the web-broker's website, prominently display a standardized disclaimer provided by HHS stating that enrollment support for the QHP is available on the Exchange website, and provide a Web link to the Exchange website, provide consumers the ability to view all QHPs offered through the Exchange, and display all QHP data provided by the Exchange. These same requirements currently apply to web-brokers operated in SBE–FPs. See 45 CFR 155.220(l). As finalized in this rule and reflected in new § 155.220(n), the web-broker requirement in § 155.220(c)(3)(i)(A) that web-brokers disclose and display on their non-Exchange website the standardized QHP information provided by the Exchange or directly by QHP issuers also extends to web-brokers in State Exchanges.

[185] This approach does not require entities to directly mirror the Exchange website displays. Rather, Exchanges will define and communicate standards that DE entities must meet when implementing and prominently displaying website display changes in a manner that is consistent with the display changes made to the Exchange websites. DE entities will have flexibility in how they reflect and incorporate those changes within the context of their user interface graphic design, provided their display meets the standards communicated by the Exchanges. For further discussion and an example of how this flexibility will be applied. See 2025 Payment Notice proposed rule (88 FR 82564–82566).

[186] In the proposed rule (88 FR 82565), we proposed that if a DE entity is unable to implement the standards defined by HHS, or the DE entity has an idea for implementation that does not meet the standards but would effectively communicate the same information to consumers, HHS may permit a deviation. We proposed that DE entities that are interested in pursuing a deviation must submit deviation requests to HHS and proposed that such requests would be subject to review by HHS in advance of implementation of any alternative display approaches. We explained that deviation requests must include a proposed alternative display and accompanying rationale. The rationale must explain why the DE entity is unable to implement the standards or how the DE entity's idea for implementation that does not meet the standards would effectively communicate the same information to consumers. Finally, we proposed that State Exchanges would also be required to establish their own deviation request process and review deviation requests submitted by their DE entities should the State Exchange elect to permit deviation requests. State Exchanges would have flexibility to establish a deviation request process as needed to meet the business needs of the State Exchange and would have discretion to approve or reject a deviation request from one of its DE entities. We are finalizing this approach as proposed but with technical changes to affirm that State Exchanges must establish a deviation request process should the State Exchange elect to permit deviation requests.

accessible, valuable tool for all Exchange consumers.

Comment: A few commenters expressed concern that the deviation request process could be used to circumvent Federal policy. The commenters requested that HHS only grant deviations upon a demonstration of a special need and that HHS clarify that it may request additional documentation to periodically reassess whether the deviation remains justified.

Response: We acknowledge the concern that the deviation request process could be used to circumvent Federal policy. However, we do not share this concern. As described above and in the proposed rule (88 FR 82565), we intend to review all deviation requests submitted by DE entities assisting consumers in the FFEs and SBE–FPs to ensure the deviation, at a minimum, provides the same level of differentiation and clarification as is provided on *HealthCare.gov.* We do not intend to approve deviation requests for display approaches that are inconsistent with the display change made to *HealthCare.gov.* We encourage State Exchanges to establish deviation requests processes and anticipate State Exchanges that opt to establish such a process will adopt a similar framework to review deviations requests and monitor implementation of approved deviations to ensure compliance by their DE entities.

Although we appreciate the suggestion that deviation requests should be limited to demonstration of special need, we note that the commenter did not define what they meant by ''special need'' in this context. If the commenter means to suggest that deviation requests should only be granted when system constraints prevent DE entities from precisely mirroring the *HealthCare.gov* display approach, and that deviation requests should not be granted when a DE entity has an innovative idea for implementation that does not meet the standards but would effectively communicate the same information to consumers, then we do not agree with this suggestion. This suggestion, if implemented, would be in opposition to our longstanding support for and encouragement of innovation by DE entities because it would prohibit the ability of DE entities to use the deviation request process to propose innovative website displays, decision-support tools, and user interface designs. Our experience operating the DE program in the FFE and SBE–FPs, particularly in soliciting feedback from DE entities regarding the effects of innovative website displays, decision support tools, and user interfaces, has helped inform display updates to *HealthCare.gov.*

We acknowledge the comment requesting we clarify that we may request additional documentation to periodically reassess whether the deviation remains justified. As described above and in the proposed rule (88 FR 82564), for DE entities assisting consumers in the FFEs and SBE–FPs, we will monitor DE entity implementation through existing periodic website review monitoring per § 155.220(c)(5) and as described in the Third-Party Auditor Guidelines. Our periodic reviews will include review of DE entities' implementation of approved deviations and may also include a review of the documentation submitted in connection with the deviation request. We may request updated documentation from DE entities if our review suggests that the deviation no longer remains justified. For example, if the initial approval was granted based on a factor which appears no longer relevant (for example, if approval was granted for the DE entity to implement an alternative display while the entity was in the process of switching to a new DE Technology Provider [187]), we would request updated documentation from the DE entity confirming whether the initial approval conditions are still relevant (for example, has the entity completed its transition to a new DE Technology Provider, using the previous example). We encourage State Exchanges to adopt these same practices in reviewing deviation requests and monitoring implementation of approved deviations to ensure compliance by their DE entities.

Comment: One commenter noted that members of the web-broker and DE community appreciate the general regulatory framework offered by HHS for the FFEs and SBE–FPs under §§ 155.220 and 155.221 and would appreciate the adoption of uniform regulatory standards by State Exchanges, including as to DE entity non-Exchange website implementation of Exchange website display changes under new § 155.221(b)(6) and (j)(3). One commenter requested that HHS clarify what would happen in instances where State Exchanges that choose to implement a DE program do not meet the requirements associated with this proposal. One commenter supported the proposal to require DE entities operating in States with State Exchanges to implement State Exchange website display changes on their non-Exchange websites but wanted HHS to encourage these States to implement the following practices when requiring DE entities to make changes to their websites: solicit feedback from industry partners; provide ample advance notice; provide flexibility in website user interfaces; and permit deviations subject to the approval of the State Exchange. One commenter similarly supported the proposal to require DE entities utilized by State Exchanges to implement State Exchange website display changes on their non-Exchange websites but encouraged HHS ''to grant the maximum amount of flexibility to State Exchanges in how they implement that process,'' explaining that this would allow State Exchanges to ''innovate and reduce the burden needed for EDE entities to produce novel tools to benefit consumers and agents.''

Response: We generally agree with the commenter that suggested State Exchanges should adopt web-broker and DE entity standards consistent with the standards for web-brokers and DE entities in the FFEs and SBE–FPs. In the proposed rule (88 FR 82564 through 82565), we proposed extending the requirements under § 155.221(b)(6) to State Exchanges and DE entities assisting consumers in those State Exchanges. We also proposed extending certain HHS minimum standards applicable to web-brokers (88 FR 82557 through 82562) and DE entities (88 FR 82566 through 82571) operating in the FFEs and SBE–FPs to web-brokers and DE entities in States with State Exchanges and, consequently, those State Exchanges.

If there is information that suggests a State Exchange or one of its DE entities does not meet the requirements of § 155.221(j) and in particular, (j)(3), we would notify the State Exchange and give them an opportunity to address the concerns. We intend to consider the development of new, additional tools to assist with oversight that could enhance transparency into compliance by State Exchanges, including their DE programs, with applicable HHS requirements including those relating to DE under § 155.221(j)(3). We may also consider use of other oversight tools and authority, including those under part 155 of our regulations, as appropriate.

As described in the responses to comments received on the proposals to require that DE entities and web-brokers operating in State Exchanges meet certain standards applicable in the FFEs and SBE–FPs (sections III.D.7 and III.D.9 of this final rule), pursuant to § 155.105, States that seek to operate a State

[187] See § 155.20 for definitions of an ''Agent or broker direct enrollment technology provider'' and ''Qualified health plan issuer direct enrollment technology provider.''

Exchange must complete and submit an Exchange Blueprint application. The Exchange Blueprint application documents that an Exchange will meet the legal and operational readiness requirements required of a State Exchange. As part of a State's Blueprint submission, the State also agrees to demonstrate operational readiness to implement and execute the Federal requirements applicable to State Exchanges, which would include the new requirements under §§ 155.220 and 155.221 applicable to State Exchanges that elect to implement a web-broker or DE program. A State Exchange that elects to operate an optional web-broker or DE program would be required to include information in its Blueprint to demonstrate operational readiness to implement and support ongoing operations of an optional web-broker or DE programs consistent with applicable requirements in §§ 155.220 and 155.221. As discussed in other sections of this final rule, we are also codifying requirements at § 155.105 related to the approval of a State Exchange whereby we will require a State seeking to establish a State Exchange to provide supplemental information in its Blueprint application to demonstrate its ability to implement and comply with the requirements for operating a State Exchange, including requirements associated with the operation of a DE program should a State elect to operate one. Such supporting information would inform HHS's decision to approve or conditionally approve a State Exchange and would help facilitate HHS' oversight of compliance with Federal requirements applicable to State Exchanges and their DE entities. Additionally, under § 155.105(e), an existing State Exchange must notify HHS in writing before making a significant change to its approved Exchange Blueprint, and no significant change to an Exchange Blueprint may be effective until it is approved by HHS in writing or 60 days after HHS receipt of a completed request.

Accordingly, for existing State Exchanges that seek to newly implement and operate a DE program, HHS would require the State to submit an updated Exchange Blueprint and participate in operational readiness reviews related to the implementation and ongoing operation of such a DE program, as we would consider a State Exchange implementing a DE program a significant change. We would also use this information in the Blueprint Application from a State Exchange on how they intend to implement the DE entity non-Exchange website display update requirements to assess a State Exchange's compliance with § 155.221(j)(3), and we would generally look to the State Exchange to oversee implementation by DE entities of non-Exchange website display changes pursuant to § 155.221(j)(3) on an ongoing basis.

We acknowledge the commenter's suggestion that we encourage State Exchanges to solicit feedback from industry partners, provide ample advance notice, provide flexibility in website user interfaces, and permit deviations subject to the approval of the State Exchange. Although we also acknowledge the commenter's suggestion that we should grant the maximum amount of flexibility to State Exchanges in how they implement these requirements, we note the commenter did not provide further details or clarification on what additional flexibilities, if any, should be granted to State Exchanges. As a result, we are unsure what the commenter is referring to. However, we agree with several of the commenter's points. As we explained in the proposed rule (88 FR 82565), we encourage State Exchanges to develop their own processes that best meet their business needs. Consistent with the commenter's suggestion, we encourage State Exchanges to solicit feedback from industry partners, including web-brokers and DE entities, and provide an advance notice period whose length corresponds to the complexity of the required display change and the urgency with which the change must be reflected on the DE entity's non-Exchange website. Also consistent with the commenter's suggestion, our policy requires State Exchanges to establish a deviation request process while providing the State Exchange discretion to approve or reject deviation requests, should the State Exchange elect to permit deviation requests. If the State Exchange permits deviation requests, we encourage State Exchanges to consider granting deviation requests if the DE entity is unable to implement the standards defined by the State Exchange or has an idea for implementation that does not meet those standards but would effectively communicate the same information to consumers. We also agree that State Exchanges should permit DE entities flexibility in how they reflect and incorporate required display changes within the context of their user interface graphic design, provided their display meets the standards communicated by the Exchanges. We also encourage State Exchanges to adopt the same requirements and framework HHS will follow for DE entity non-Exchange website display updates for the FFEs and SBE–FPs, whenever possible.

9. Ensuring DE Entities Operating in State Exchanges Meet Certain Standards Applicable in the FFEs and SBE–FPs (§ 155.221)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82566), we proposed to amend § 155.221 to extend certain existing HHS standards applicable to DE entities assisting the FFEs' and SBE–FPs' [188] consumers and applicants with direct enrollment in QHPs and applying for APTC/CSRs to DE entities operating in State Exchanges, in both the Individual Market Exchanges and SHOPs. These policies would extend certain HHS DE program standards to DE entities operating in State Exchanges, and consequently to those State Exchanges that, to the extent permitted by applicable State law, permit DE entities to assist their consumers and applicants with direct enrollment in QHPs and applying for APTC/CSRs in a manner that constitutes enrollment through an Exchange.[189] These policies would also ensure that certain minimum HHS standards would apply to DE entities across all Exchanges, including standards governing DE entity marketing and display of QHPs and non-QHPs, providing consumers with correct information and refraining from certain conduct [190] marketing of non-QHPs, website disclaimer language, and operational readiness.

Notably, we stated in the proposed rule (88 FR 82566) that our regulations do not currently address whether and how DE entities may assist consumers and applicants with DE in QHPs and submission of applications for APTC/CSRs in a manner that constitutes enrollment through a State Exchange. We believe that current and future State

[188] See 45 CFR 155.221(i) (''A direct enrollment entity that enrolls qualified individuals in coverage in a manner that constitutes enrollment through a State Exchange using the Federal platform, or assists individual market consumers with submission of applications for advance payments of the premium tax credit and cost-sharing reductions through a State Exchange using a Federal platform must comply with all applicable Federally-facilitated Exchange standards in this section.'').

[189] See 78 FR 37065 through 37066 and 78 FR 54124 through 54126.

[190] Consistent with the amendments and policies adopted in this final rule, this standard applies to both QHP issuer DE entities, as well as web-brokers DE entities, across all Exchange types. For QHP issuer DE entities, see 45 CFR 155.221(a)(1) and (i), and 156.1230(b)(2). For web-broker DE entities, see 45 CFR 155.220(j)(2)(i), (l), and (n), and 155.221(a)(2).

Exchanges may seek to implement DE programs similar to the FFEs and SBE–FPs. As such, we believe that DE entities seeking to assist State Exchange consumers with DE in QHPs and submission of applications for APTC/CSRs in a manner that constitutes enrollment through an Exchange should meet the same or, at a minimum, similar standards that DE entities in the FFEs and SBE–FPs are required to meet to protect consumers and safeguard Exchange operations. These standards would mitigate the potential for consumer confusion of QHPs with non-QHPs (including eligibility for APTC and/or CSR as it relates to QHPs versus non-QHPs) and about which products are or are not available through the Exchange, helping to ensure proper eligibility determinations and protect against security incidents through implementation of operational readiness reviews (as websites that have not been tested for operational readiness may provide improper eligibility determinations or have security flaws that could increase the likelihood of a breach involving consumer PII).[191]

We recognize that, to date, no State Exchanges have implemented DE programs; however, as we stated in the proposed rule (88 FR 82566 and 82567), we anticipate that there may be growing interest in doing so. As such, we recognize a potential burden on State Exchanges that would newly be subject to the standards being proposed, if they choose to implement DE programs. This would include drafting new policies, updating standards, and potentially hiring additional staff to perform functions not currently being performed by the State Exchanges, including providing technical assistance during development and implementation of DE programs in the State Exchanges, creating the framework for and conducting operational readiness reviews, including developing and maintaining documentation needed to complete the operational readiness reviews, as well as conducting ongoing oversight and taking appropriate enforcement action in response to DE entity non-compliance with applicable requirements. This potential burden would also include requiring and overseeing web-development and the hosting of non-Exchange websites by DE entities participating in these State Exchanges to ensure compliance with the proposed minimum standards outlined in this rulemaking.

Similar to the agent, broker and web-broker requirements under § 155.220, currently, § 155.221 only applies to DE entities assisting consumers and applicants in the FFEs and SBE–FPs. Section 155.221(a) provides that the FFEs will permit the following entities to assist consumers with DE in QHPs offered through the Exchange in a manner that is considered to be through the Exchange, to the extent permitted by applicable State law: (1) QHP issuers that meet the applicable requirements in §§ 155.221 and 156.1230, and (2) web-brokers that meet the applicable requirements in §§ 155.220 and 155.221. These same entities are permitted to assist consumers with DE in QHPs offered through the Exchange in a manner that is considered to be through the Exchange, to the extent permitted by applicable State law, in SBE–FP States.[192] The HHS DE Program includes two DE pathways: Classic DE and EDE. The proposal to extend certain existing HHS standards applicable to DE entities participating in FFE and SBE–FP States to State Exchanges and their DE entities would also apply to the operation of Classic DE and EDE within these State Exchanges. That is, under this policy, State Exchanges that choose to implement DE programs in their States would be permitted to adopt the same pathways or tailor their configuration in a manner best suited to their operational and business needs, so long as their DE programs meet the HHS minimum standards under § 155.221 that we proposed to extend to State Exchanges and their DE entities. We explained that we would be available to provide extensive technical assistance to State Exchanges that choose to implement DE programs.

As detailed further below, we proposed to add paragraph (j) to § 155.221 to extend certain HHS minimum DE entity standards in § 155.221 to DE entities operating in State Exchanges and, consequently, to these State Exchanges that choose to implement DE programs in their States. Through this proposed approach, we seek to ensure that DE entities assisting these State Exchanges' consumers with DE in QHPs and applying for APTC/CSRs in a manner that constitutes enrollment through the Exchange meet HHS minimum standards governing DE entity marketing and display of QHPs, providing consumers with correct information and refraining from certain conduct, marketing of non-QHPs, website disclaimer language, and operational readiness. We explained that, under this proposed approach, we would encourage State Exchanges to require DE entities to engage a third-party auditor to perform the operational readiness review audits of their DE entities, consistent with the operational readiness framework adopted by HHS for the FFEs and SBE–FPs. As stated earlier, we recognize that there may be a growing interest from State Exchanges to operate DE programs, and we seek to establish a set of HHS minimum standards to ensure appropriate safeguards are in place, regardless of the Exchange model. Further, the proposed approach to establish a minimum set of HHS standards that would apply to DE entities across all Exchanges would support efficiency in DE entity operations across all Exchanges, including State Exchanges, while also providing flexibility for State Exchanges to tailor their DE program and establish their own standards with respect to operational readiness demonstrations by their DE entities, including whether to require third-party audits of DE entities and to impose additional requirements beyond the proposed HHS minimum standards as they determine may be appropriate based on their operational or business needs. As described above, if they choose to implement DE programs, the State Exchanges would be required to draft policies, update standards, and potentially hire additional staff to perform functions and activities not currently being performed by the State Exchanges in order to comply with these policies.

We proposed to update § 155.221(a), which identifies the entities permitted to be DE entities in FFE and SBE–FP States, to apply across all Exchanges, including State Exchanges. Under this proposal, State Exchanges that choose to implement a DE program may permit QHP issuers and web-brokers that meet applicable requirements to assist consumers with submitting applications for APTC/CSRs and DE in QHPs offered through the Exchange in a manner that is considered to be through the Exchange. Under the framework proposed in the proposed rule, the applicable requirements that would extend to web-broker DE entities in States with State Exchanges would include certain paragraphs of §§ 155.220(c) and (j) and 155.221(a), (b), (c), (d), and (j). We describe above the extension of certain HHS web-broker

[191] The amendments to § 155.221 we are finalizing will not impact how DE entities may assist consumers and applicants in SBE–FP States. Section 155.221(i) provides that a DE entity that enrolls qualified individuals in coverage in a manner that constitutes enrollment through an SBE–FP or assists individual market consumers with submission of applications for APTC and CSRs through an SBE–FP, must comply with all applicable HHS standards in § 155.221. We did not propose and are not finalizing any changes to this existing framework for DE entities who assist consumers and applicants in SBE–FP States.

[192] 45 CFR 155.221(i).

standards in § 155.220(c) and (j) to State Exchanges and their web-brokers and detail below the HHS web-broker DE entity standards in § 155.221(a), (b), (c), (d), and (j) we proposed extending to web-broker DE entities in State Exchanges. As described further below, we proposed that the applicable requirements that would apply to QHP issuer DE entities in State Exchanges would be certain HHS QHP issuer DE entity standards in §§ 155.221(a), (b), (c), (d), and (j) and 156.1230(b). The proposals to extend certain HHS requirements in § 155.221 to these State Exchanges' web-broker DE entities are intended to align with the proposals described above to extend certain HHS standards and consumer protections in § 155.220 to these State Exchanges' web-brokers.[193] The proposals to extend certain HHS requirements to QHP issuer DE entities are similarly intended to establish a minimum set of standards and consumer protections, with the HHS requirements generally serving as a floor for State Exchanges that choose to implement DE programs. As detailed further below, as part of these proposals to extend certain HHS requirements to DE entities, we would rely on State Exchanges to enforce compliance with these requirements and take enforcement action as needed when a DE entity fails to comply with applicable requirements. However, we would provide technical assistance to support State Exchange efforts to take appropriate enforcement action as needed to ensure compliance with applicable requirements.

Consistent with the cross-reference in § 155.221(a)(1), we proposed to extend the HHS requirements of § 156.1230(b) governing QHP issuer DE entities to also apply to QHP issuer DE entities assisting consumers with submitting applications for APTC/CSRs and DE in QHPs offered through the Exchange in States with State Exchanges. As reflected in new section § 155.221(a)(1)(i), for purposes of extending the HHS requirements of § 156.1230(b) to these States Exchanges and their QHP issuer DE entities, references in § 156.1230(b) to ''Federally-facilitated Exchange,'' ''HHS,'' and ''*HealthCare.gov*'' would be understood to mean ''the applicable State Exchange,'' ''the applicable State Exchange,'' and ''the applicable State Exchange website,'' respectively. Consistent with §§ 156.1230(b)(1) and (2), to directly enroll consumers in a manner that is considered to be through the Exchange, QHP issuer DE entities are required to comply with the applicable requirements in § 155.221 and provide consumers with correct information, without omission of material fact, regarding the Exchanges, QHPs offered through the Exchanges, and insurance affordability programs,[194] and refrain from marketing or conduct that is misleading (including by having a DE website that HHS determines could mislead a consumer into believing they are visiting *HealthCare.gov*), coercive, or discriminates based on race, color, national origin, disability, age, or sex. These HHS standards already extend to QHP issuer DE entities in SBE–FP States.[195] We proposed to extend these HHS requirements to also apply them to QHP issuer DE entities in State Exchanges. State Exchanges' QHP issuer DE entities would similarly be required to provide consumers with correct information, without omission of material fact, regarding the Exchanges, QHPs offered through the Exchanges, and insurance affordability programs.[196] In addition, QHP issuer DE entities in State Exchanges would also be required to refrain from marketing or conduct that is misleading (including by having a DE website that the State Exchange determines could mislead a consumer into believing they are visiting the Exchange's website), coercive, or discriminates based on race, color, national origin, disability, age, or sex. We solicited comments on whether § 156.1230 should also be amended to affirm its applicability to these State Exchanges and their QHP issuer DE entities.[197]

In addition, we proposed that all Exchanges, including State Exchanges that choose to implement DE programs, must require their DE entities, both web-broker and QHP issuer DE entities, to meet the HHS standards under § 155.221(b)(1) governing plan display and marketing for QHPs and any other products offered on the Exchange. These HHS standards governing plan display and marketing for QHPs and any other products offered on the Exchange currently apply today to approved web-broker and QHP issuer DE entities in FFE and SBE–FP States.[198] As such, in new paragraph (j), we proposed to extend § 155.221(b)(1), and the exceptions in § 155.221(c), to DE entities participating in State Exchanges and, consequently, to these State Exchanges. Under this proposal, DE entities participating in State Exchanges would be required to display and market QHPs offered through the Exchange, individual health insurance coverage as defined in § 144.103 offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits), and any other products, such as excepted benefits, on at least three separate website pages on its non-Exchange website, except as permitted under § 155.221(c). Pursuant to the exception under § 155.221(c)(1), a DE entity operating in a State Exchange would be permitted to display and market individual health insurance coverage offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits) on the same website pages when assisting individuals who have communicated receipt of an offer of an individual coverage health reimbursement arrangement as described in § 146.123(c) (as a standalone benefit, or in addition to an offer of an arrangement under which the individual may pay the portion of the premium for individual health insurance coverage that is not covered by an individual coverage health reimbursement arrangement using a salary arrangement pursuant to a cafeteria plan under section 125 of the Internal Revenue Code) but would be required to clearly distinguish between the QHPs offered through the Exchange and individual health insurance coverage offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits), and prominently communicate that APTC and CSRs are available only for QHPs purchased through the Exchange, that APTC are not available to individuals who accept an offer of an individual coverage health reimbursement arrangement or opt out of an individual coverage health reimbursement arrangement that is considered affordable, and that a salary reduction arrangement under a cafeteria plan may only be used toward the cost of premiums for plans purchased outside the Exchange. Under this proposal, pursuant to the exception in § 155.221(c)(2), DE entities operating in States with State Exchanges would be permitted to display and market Exchange-certified stand-alone dental plans offered outside the Exchange and non-certified stand-alone dental plans on the same website pages.

[193] As previously noted, the HHS requirements for web-brokers in §§ 155.220 and 155.221 also currently extend to web-brokers participating in SBE–FPs. See 45 CFR 155.220(l) and 155.221(i).

[194] See 42 CFR 435.4 for the definition of insurance affordability programs.

[195] See 45 CFR 155.221(a)(1) and (i).

[196] Id.

[197] We noted in the proposed rule (88 FR 82568) that if § 156.1230 were amended to affirm its applicability to these State Exchanges and their QHP issuer DE entities, parallel revisions may be made to § 156.1230 in the final rule to also capture and affirm its applicability to SBE–FPs and their QHP issuer DE entities.

[198] 45 CFR 155.221(b)(1) and (i).

In new paragraph (j), we also proposed to extend the HHS marketing standard at § 155.221(b)(3) to DE entities participating in State Exchanges and, consequently, to State Exchanges that choose to implement a DE program, such that these DE entities would also be required to limit marketing of non-QHPs during the Exchange eligibility application and QHP selection process in a manner that minimizes the likelihood that consumers will be confused as to which products and plans are available through the Exchange and which products and plans are not, except as permitted under § 155.221(c)(1). Refer to the discussion above regarding the exception in § 155.221(c)(1) pertaining to DE entities assisting individuals who have communicated receipt of an offer of an individual coverage health reimbursement arrangement as described in § 146.123(c), as a standalone benefit or in addition to an offer of an arrangement under which the individual may pay the portion of the premium for individual health insurance coverage that is not covered by an individual coverage health reimbursement arrangement using a salary arrangement pursuant to a cafeteria plan under section 125 of the Internal Revenue Code.

As we explained in the proposed rule (88 FR 82568 and 82569), we believe requiring DE entities participating in all Exchanges to meet the plan display and marketing requirements in § 155.221(b)(1) and (3) adopted by HHS for FFE and SBE–FP States would provide necessary safeguards for consumers who may participate in DE programs across all Exchange models, including in State Exchanges. Requiring DE entities across all Exchanges to meet these HHS plan display and marketing requirements would protect consumers by minimizing their confusion regarding which products and plans are available through the Exchange, which products and plans are not, and which products and plans are eligible for APTC and CSRs. Further, the adoption of uniform requirements across Exchanges in this regard can also alleviate burden on DE entities from having to build different programs and comply with a unique set of requirements for each State Exchange that chooses to implement a DE program, as well as burden on a State Exchange from having to develop an entirely new set of requirements for DE entities that participate in their State Exchange. We recognize that elsewhere in this rulemaking, we have built in flexibility for State Exchanges to tailor certain aspects of their DE programs and associated oversight processes to best suit their State-specific needs and requirements (for instance, the operational readiness review requirements for web-brokers and DE entities participating in State Exchanges). In this case, however, we believe that the benefits to consumers of uniformly applying the plan display and marketing requirements in § 155.221(b)(1) and (3) to ensure they apply to all Exchanges as minimum standards outweigh the potential drawbacks of reducing discretion and flexibility to State Exchanges with respect to modifying these baseline requirements. We solicited comments on whether State Exchanges should instead be provided with broader discretion and flexibility to establish their own plan display and marketing requirements tailored to their consumers or local needs.

In new paragraph (j), we also proposed to extend the existing standardized disclaimer requirement in § 155.221(b)(2) to apply to DE entities participating in State Exchanges and, consequently, to these State Exchanges that choose to implement a DE program. Pursuant to § 155.221(b)(2) and (i), DE entities in FFE and SBE–FP States are required to prominently display a standardized disclaimer in the form and manner provided by HHS.[199] This disclaimer is separate from the Enrollment Support and General non-FFE standardized disclaimers under § 155.220(c)(3)(i)(A) and (G), respectively, that web-brokers are required to display when their non-Exchange websites are used to complete a QHP selection or complete the Exchange eligibility application.[200] The standardized disclaimer required under § 155.221(b)(2) instead is intended to help consumers understand the difference between QHPs and non-QHPs, and that financial assistance (that is, APTC and CSRs) is only available for QHPs. Under this proposal, DE entities in State Exchanges, like DE entities in FFEs and SBE–FPs under existing § 155.221(b)(2), would also be required to prominently display a standardized disclaimer that similarly informs consumers about the differences between QHPs and non-QHPs, and that financial assistance is only available for QHPs. The purpose of this standardized disclaimer is to assist consumers in distinguishing between DE entity non-Exchange website pages that display QHPs and those that display non-QHPs, and for which products APTC and CSRs are available. Consistent with the current practice for the other standardized disclaimers provided by HHS under §§ 155.220 and 156.1230, we would provide further details on the HHS standards for the text and other display details for the standardized disclaimer in technical guidance.

This proposal would require that the disclaimer be prominently displayed on the non-Exchange website of a DE entity assisting consumers in State Exchanges when a consumer navigates away from any website page that markets or displays QHPs offered through the Exchange (that is, on-Exchange QHPs) to any website page that markets or displays QHPs offered outside the Exchange (that is, off-Exchange QHPs) or non-QHPs. Each DE entity would be required to display this disclaimer on its own interstitial website page or on a pop-up window.

We proposed in paragraph (j)(1) to provide State Exchanges with flexibility regarding the standardized disclaimer language that would be required to be displayed by their DE entities, provided that the additional language does not conflict with the HHS-provided standardized disclaimer. This proposed flexibility is similar to the flexibility we are finalizing in section III.D.7 of this final rule for State Exchanges to modify the web-broker Enrollment Support and General non-FFE standardized disclaimers under § 155.220(c)(3)(i)(A) and (G), such that the HHS-provided language for the standardized disclaimer under § 155.221(b)(2) must be used as a minimum starting point but State Exchanges may add State-specific information to the disclaimers, provided the additional language does not conflict with the HHS-provided standardized disclaimer.[201] This would permit State Exchanges to replace references to the Exchange or Marketplace with the appropriate reference to the State-specific Exchange name. Under this proposal, State Exchanges may also require web-brokers and QHP issuers operating as DE entities in their States to translate the disclaimer text into languages appropriate for the States, as this type of additional requirement would not conflict with the HHS-provided disclaimer language or minimum standards. As with all informational materials, standard plain language

[199] See 84 FR 17523.

[200] As detailed above, we proposed to extend the Enrollment Support and General non-FFE standardized disclaimers to State Exchanges and web-brokers participating in those State Exchanges and are finalizing these proposals without modification.

[201] Consistent with the current practice for the other HHS-provided standardized disclaimers under §§ 155.220 and 156.1230, we will provide details on the text for the standardized disclaimer under § 155.221(b)(2) in guidance.

practice is to write at or near a fourth-grade reading level and not to exceed an eighth-grade reading level. We explained that we expect that any State-specific additions or customizations to this disclaimer would be written accordingly. As we explained in the proposed rule (88 FR 82569), we would be available to provide technical assistance to State Exchanges that want to add State-specific language to the standardized disclaimer under § 155.221(b)(2). In using HHS-provided disclaimer language as a minimum starting point, DE entities in State Exchanges would be required to display a disclaimer that provides information to assist consumers in distinguishing between DE entity non-Exchange website pages that display QHPs and those that display non-QHPs and for which products APTC and CSRs are available, all during a single shopping experience for consumers.

We believe establishing the HHS language as a minimum standard for the standardized disclaimer under § 155.221(b)(2) that DE entities must display across all Exchanges would provide a necessary baseline. We also believe that meeting these standards would ensure consumers and applicants are receiving sufficient information to help them distinguish between DE entity website pages displaying QHPs versus pages displaying non-QHPs and provide general uniformity among the different Exchange models when enrollment or enrollment information is provided outside of the Exchange through a DE entity's non-Exchange website.

Similar to the proposed requirement to extend operational readiness requirements to web-brokers in States with State Exchanges, we also proposed to extend operational readiness requirements to DE entities in State Exchanges and, consequently, to these State Exchanges. DE entities that participate in FFE and SBE–FP States are required, pursuant to § 155.221(b)(4) and (i), to demonstrate to HHS operational readiness and compliance with applicable requirements prior to the DE entity's non-Exchange website being used to complete an Exchange eligibility application or a QHP selection. In new paragraph (j)(2), we proposed to extend DE entity operational readiness requirements to State Exchanges. Under this policy, DE entities participating in State Exchanges would be required to demonstrate operational readiness and compliance with applicable requirements to the State Exchange prior to the DE entity's website being used to complete an Exchange eligibility application or a QHP selection. We also proposed in new paragraph (j)(2) to require these State Exchanges to establish the form and manner for their DE entities to demonstrate operational readiness and compliance with applicable requirements, which may include submission or completion of the same items business audit documentation or security and privacy audit documentation in § 155.221(b)(4)(i) and (ii) to the State Exchange, in the form and manner specified by the applicable State Exchange. Pursuant to § 155.221(b)(4)(i) and (ii), HHS may request a DE entity submit a number of documents to demonstrate compliance with applicable requirements, as well as the operational readiness of its non-Exchange website. The required documentation may include privacy questionnaires, privacy policy statements, and terms of services, business audit reports, interconnection security agreements, security and privacy controls assessment and plans, security, and privacy assessment reports, plans of action and milestones, privacy impact assessments, system security and privacy plans, incident response plans, and vulnerability scan results. We proposed to codify these documentation standards in new paragraphs (j)(2)(i) and (ii) as illustrative examples of the type of requirements that we encourage State Exchanges that choose to implement a DE program to adopt as part of their operational readiness and compliance reviews of DE entities non-Exchange websites.

This proposal would require DE entities participating in State Exchanges to meet operational readiness requirements established by the State Exchanges, and State Exchanges would have flexibility when establishing operational readiness requirements for their respective DE programs, potentially leveraging the items in § 155.220(b)(4)(i) and (ii) as the starting point for their operational readiness requirements and associated reviews. Similar to the web-broker operational readiness reviews under § 155.220(c)(6), the standards under § 155.221(b)(4) governing the HHS operational readiness reviews of DE entity non-Exchange websites are also a critical part of the oversight framework for HHS' DE program (both Classic DE and EDE) available in the FFEs and SBE–FPs. These standards as they apply to DE entities participating in FFE and SBE–FP States help ensure operational readiness and compliance with applicable requirements prior to the DE entity's non-Exchange website being used to complete Exchange eligibility application or a QHP selection and help ensure consumers would not be able to enroll via a DE entity's website that is not operationally ready. Websites that have not been tested to see if they are operationally ready may not provide consumers with proper eligibility determinations or may have security flaws that could make a breach involving consumer PII more likely. Mandating DE entities that participate in State Exchanges meet minimum standards set by the State Exchanges for operational readiness would help reduce this risk in all Exchanges.

We recognize that some State Exchanges that choose to implement a DE program may seek to utilize DE entities already participating in DE in the FFEs or SBE–FPs. As part of establishing its operational readiness requirements for participating DE entities, we specifically encourage those State Exchanges to adopt the same operational readiness requirements for DE entities established by HHS, including the third-party auditor framework adopted by HHS pursuant to § 155.221(f) and (g). We also encourage those State Exchanges to leverage HHS' review of those third-party audits and determinations made as to the DE entities' functionality and operational readiness to operate with the Federal platform (*HealthCare.gov*) as part of their assessment of DE entity compliance and readiness to operate in their State Exchange. We recognize that leveraging HHS' reviews may supplement other State-specific operational readiness reviews and requirements that State Exchanges that choose to implement a DE program might develop.

Adopting HHS's operational readiness requirements for DE entities under § 155.221(b)(4), (f), and (g) and leveraging HHS's review of third-party audits and determinations made as to DE entities' functionality and operational readiness would support State Exchanges in having confidence in the ability of those DE entities to also participate in State Exchanges when HHS determined that those DE entities have already demonstrated operational readiness and compliance with applicable requirements to operate with the Federal platform (*HealthCare.gov*). This approach would also help minimize the burden of operational readiness reviews on State Exchanges and on their DE entities. For example, if the State Exchange uses the single streamlined eligibility application described in § 155.405 and the DE entity has already been approved to participate in the FFEs or SBE–FPs, we would encourage State Exchanges to accept

HHS' review of and determinations made as to the DE entity's audit documentation without conducting further review to confirm operational readiness of the DE entity's non-Exchange website and compliance with the HHS minimum standards. However, we also recognize that to-date, all State Exchanges have implemented (or intend on implementing) alternative single, streamlined eligibility applications and eligibility systems that are tailored to their State-specific needs and rules. Thus, it is important to provide State Exchanges with flexibility to establish their own operational readiness requirements and associated reviews in a manner that is tailored to best meet their State-specific needs, since State Exchanges are best positioned to make those decisions. In the proposed rule (88 FR 82570), we therefore encouraged, but did not propose to require, these State Exchanges to adopt the same operational readiness requirements and third-party auditor framework that HHS adopted under § 155.221(b)(4), (f), and (g) for DE entities assisting FFE and SBE–FP consumers.

We explained that we would also encourage State Exchanges that choose to implement a DE program to consider requiring their DE entities to engage a third-party auditor, consistent with standards adopted by HHS at § 155.221(f) and (g) that apply in FFE and SBE–FP States, to perform the operational readiness reviews, for example, to provide an unbiased confirmation that the DE entities are able to appropriately conduct eligibility determinations. However, we did not propose to mandate that State Exchanges require their DE entities to perform such third-party audits as we recognize that State Exchanges may want to establish their own State-specific requirements and mechanisms to confirm DE entity operational readiness and compliance with applicable requirements (both HHS and State-specific standards), and we want to ensure State Exchanges have the flexibility to establish operational readiness review requirements that are tailored to meet State-specific rules and requirements. For example, as noted above in this section of this final rule, if the State Exchange uses an alternative to the single streamlined application described in § 155.405, we would not recommend leveraging HHS' eligibility application audit under § 155.221(b)(4)(iii), as the HHS audit results may not be applicable to the State Exchange's alternative eligibility applications and associated State-developed eligibility systems. However, if the State Exchange uses the single streamlined application described in § 155.405 we would encourage the State Exchange to use the same third-party auditor framework and requirements that HHS adopted for FFE and SBE–FP States, as well as accept HHS' review of the third-party audits and determinations made as to the DE entity's operational readiness and compliance with the HHS minimum standards without conducting further review for DE entities that have already been approved to participate in the FFEs or SBE–FPs, unless there are other unique State-specific requirements that warrant further, targeted review.

As State Exchanges establish DE programs, we recognized that it may be in their interest to permit a DE entity to provide consumers with access to DE entity application assisters, as defined at § 155.20, to provide assistance with applying for a determination or redetermination of eligibility for individual market coverage through the Exchange and insurance affordability programs. As such, in new paragraph (j), we proposed to extend § 155.221(d) to State Exchanges and their DE entities to allow DE entity application assisters, when permitted by the applicable State Exchange and only to the extent permitted by applicable State law, to assist individuals in the individual market with applying for a determination or redetermination of eligibility for coverage through the Exchange and for insurance affordability programs, provided that such DE entities ensure that each of its DE entity application assisters meets the requirements in § 155.415(b). Section 155.415(b) establishes minimum standards for QHP issuer and DE entity application assisters regarding required training on QHP options and insurance affordability programs, eligibility, benefits rules and regulations, and compliance with the Exchange's privacy and security standards and applicable State laws related to the sale, solicitation and negotiation of insurance products, including any applicable State licensure laws and State laws related to confidentiality and conflict of interest.

Although § 155.415(b) is generally applicable to all Exchanges, paragraph (b)(1) establishes required training on QHP options and insurance affordability programs, eligibility, and benefits rules and regulations with respect to providing assistance in the FFEs or SBE–FPs. As proposed to be applied in State Exchanges, DE entities and their application assisters would be required under new paragraph (j) to complete appropriate State-required training and registration in a manner specified by the State Exchange consistent with § 155.415(b)(1). This State-required training and registration should similarly include training on QHP options and insurance affordability programs, eligibility, and benefits rules and regulations, as training on these topics would be necessary to ensure consumers are provided with vital information about these topics if DE entities and their application assisters were permitted to assist consumers with QHP shopping and DE in coverage offered through State Exchanges.

In addition, under this proposal, to meet the requirements of § 155.415(b)(2) and (3), DE entities that participate in a State Exchange and want to use DE entity application assisters would be required to coordinate with the State Exchange and appropriate State agencies to ensure they are meet the Exchange privacy and security standards at § 155.260 consistent with § 155.415(b)(2), as well as comply with State laws related to the sale, solicitation, and negotiations of health insurance products consistent with § 155.415(b)(3).

In the proposed rule (88 FR 82571), we also encouraged State Exchanges, as part of their establishment of DE programs, to adopt an immediate suspension framework, similar to § 155.221(e) that applies in FFE and SBE–FP States, that provides for the immediate suspension of a DE entity's ability to transact information with the State Exchange if the State Exchange discovers circumstances that pose unacceptable risk to the accuracy of the State Exchange's eligibility determinations, operations, or information-technology systems until the incident or breach is remedied or sufficiently mitigated to the State Exchange's satisfaction. This provision is an important feature of HHS' oversight of the use of DE entity non-Exchange websites in FFE and SBE–FP States that protects consumer data and safeguards Exchange operations and systems. State Exchanges that choose to establish a DE program and permit DE entities to use non-Exchange websites to assist consumers with QHP selection and submission of Exchange eligibility applications should consider adoption of similar measures.

Finally, under new proposed § 155.221(j)(3), we proposed to extend the new requirement that would be applicable in FFE and SBE–FP States under proposed § 155.221(b)(6) (the proposal discussed in section III.D.8 of this final rule to mandate that DE entities implement and prominently display website changes in a manner that is consistent with display changes

made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS) to apply to DE entities operating in State Exchanges and, consequently, to these State Exchanges. As reflected in the last clause of new proposed § 155.221(j)(3), for the purposes of extending this requirement to DE entities operating in the State Exchanges, references to an FFE website would be understood to mean the State Exchange website, references to HHS would be understood to mean the State Exchange, and references to ''unless HHS approves a deviation from those standards'' would be understood to mean ''unless the State Exchange approves a deviation from those standards under the deviation request process the State Exchange is required to establish should the State Exchange elect to permit deviation requests.'' Refer to the discussion in section III.D.8 of this final rule for additional details on the extension of this proposal to State Exchanges and their DE entities.

We sought comment on these proposals, especially from States operating, or seeking to operate, State Exchanges. We were particularly interested in comments regarding which of the other current HHS standards at § 155.221 should or should not apply to State Exchanges that choose to implement a DE program.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these provisions as proposed. Below, we summarize and respond to public comments received on our proposal to amend § 155.221 to extend certain existing HHS standards applicable to DE entities assisting the FFEs' and SBE–FPs' consumers and applicants with direct enrollment in QHPs and applying for APTC/CSRs to DE entities operating in State Exchanges, in both the Individual Market Exchanges and SHOPs.

Comment: Most commenters were broadly supportive of these proposals. Several commenters specifically cited that requiring DE entities to display and market QHPs through the Exchange, individual health insurance coverage as defined in § 144.103 offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits), and any other products on separate website pages (except as permitted under § 155.221(c)), and requiring DE entities to limit marketing of non-QHPs during the Exchange eligibility application and QHP selection process, were important consumer safeguards. Several commenters additionally cited that the proposals would generally enhance the consumer shopping experience by providing consumers with a higher-quality and more consistent user experience that allows them to access accurate coverage information whether they utilize the Exchange's website or a DE entity's non-Exchange website.

A few commenters stated that if State Exchanges leveraged HHS's review of third-party audits and determinations made as to DE entities' operational readiness and compliance with applicable requirements, particularly with respect to security and privacy, that would help reduce duplication of efforts and alleviate the compliance burden of operational readiness activities on DE entities participating in State Exchanges and those State Exchanges, helping to increase the likelihood of DE entity participation in State Exchanges. Some of these commenters further expanded on this, stating that if State Exchanges leveraged HHS's review of third-party audits and determinations made as to DE entities' operational readiness and compliance with applicable requirements, that would help DE entities avoid having to comply with a unique set of operational readiness requirements for each State Exchange that chooses to implement a DE program. This could provide consistency, and it may facilitate DE entities' increased participation across Exchanges by potentially allowing them to leverage some of their operational readiness activities for FFE States in State Exchange States.

Response: We appreciate commenters' support for these proposals. For the reasons we explained in the proposed rule (88 FR 82568), we agree that requiring DE entities to display and market QHPs through the Exchange, individual health insurance coverage as defined in § 144.103 offered outside the Exchange (including QHPs and non-QHPs other than excepted benefits), and any other products on separate website pages (except as permitted under § 155.221(c)), and requiring DE entities to limit marketing of non-QHPs during the Exchange eligibility application and QHP selection process, are important consumer safeguards that will help provide consumers across all Exchanges with a more consistent shopping experience. These safeguards are particularly important as there is increasing interest among State Exchanges in pursuing DE, which, absent this proposal, may result in divergence across Exchanges in terms of both DE plan display and marketing practices and the consumer experience.

We also agree that with the commenters that if State Exchanges that choose to implement a DE program leveraged HHS's review of third-party audits and determinations made as to DE entities' operational readiness and compliance with applicable requirements, that would help alleviate the burden of operational readiness activities on DE entities in participating in State Exchanges and those State Exchanges. We further agree that the reduced burden may encourage DE entity participation in the State Exchanges. As we explained in the proposed rule (88 FR 82562), we generally encourage any State Exchange that elects to implement a DE program to leverage our operational readiness reviews conducted for DE entities in the FFEs and SBE–FPs, as appropriate.

We note that in establishing the standards for their DE programs, State Exchanges that elect to implement a DE program must develop criteria and a process for assessing the operational readiness and compliance of their DE entities with applicable rules, and these State Exchanges may develop operational readiness requirements that address or reflect State-specific needs and requirements. Notably, our policy provides State Exchanges with the flexibility to tailor their criteria and process to reflect such State-specific needs and requirements. For example, a State may develop standards and processes for testing the State-specific interfaces and associated functionality between their DE entity non-Exchange websites and the State Exchange's centralized eligibility and enrollment platform that go beyond what is required by the HHS standards under § 155.221(b)(4), to ensure that eligibility applications completed on DE entity non-Exchange websites result in accurate eligibility determinations based on State-specific rules for eligibility. Similarly, a State may decide to develop processes to confirm a DE entity is able to effectively carry out eligibility functions with the State Medicaid agency that go beyond what is required by the HHS standards under § 155.221(b)(4), to ensure that an eligibility application completed on a DE entity non-Exchange website results in accurate eligibility determinations based on State-specific rules for Medicaid eligibility.

Comment: A few commenters who supported the proposals stated that the final rule should indicate how CMS will track compliance with the requirements applicable to State Exchanges that choose to implement DE programs under § 155.221(j).

Response: We monitor State Exchange compliance with Exchange requirements under Part 155 of our regulations through the annual

collection and review of State-submitted information, performance monitoring data, financial reporting, and independent external audits, as specified at § 155.1200. We will use that information and data to drive our efforts to monitor compliance with § 155.221(j) by State Exchanges that choose to implement DE programs. We also rely on regular communications with the State Exchanges to assess compliance with applicable requirements, as well as to gather information and provide technical assistance as needed. We may also consider the development of new additional tools to assist with oversight that could enhance transparency into compliance by State Exchanges with applicable requirements, including those applicable to their DE entities under § 155.221(j).

In addition, pursuant to § 155.105, States that seek to operate a State Exchange must complete and submit an Exchange Blueprint application. The Exchange Blueprint application documents that an Exchange will meet the legal and operational readiness requirements required of a State Exchange. As part of a State's Blueprint submission, the State also agrees to demonstrate operational readiness to implement and execute the HHS requirements applicable to State Exchanges, which would include the new requirements under § 155.221(j) applicable to State Exchanges that choose to implement a DE program. As discussed in other sections of this rule, HHS is also codifying requirements related to the approval of a State Exchange whereby HHS will require a State seeking to establish a State Exchange to provide supplemental information in its Blueprint application to demonstrate its ability to implement and comply with the requirements for a State Exchange, which would include the provision of information from State Exchanges that choose to implement a DE program on how they intend to implement the new requirements in § 155.221(j) and oversee compliance going forward. Such supporting information would inform HHS's decision to approve or conditionally approve a State Exchange and would help facilitate HHS' oversight of compliance with HHS requirements applicable to State Exchanges that choose to implement a DE program. Additionally, under § 155.105, an existing State Exchange must notify HHS in writing before making a significant change to its approved Exchange Blueprint, and no significant change to an Exchange Blueprint may be effective until it is approved by HHS in writing or 60 days after HHS receipt of a completed request. Accordingly, for existing State Exchanges that seek to newly implement a DE program, HHS would require the State to submit an updated Exchange Blueprint and participate in operational readiness reviews related to the implementation and ongoing operation of such a DE program, as we would consider a State Exchange implementing a DE program a significant change. Once implemented, for State Exchange ongoing operation of a DE program, HHS would monitor State Exchange operations through the annual reporting by State Exchanges related to compliance with Federal requirements, consistent with our oversight authority at § 155.1200(b)(2). Specifically, HHS would use this oversight authority to evaluate State Exchange compliance with the policies we are finalizing at § 155.221 for those State Exchanges that elect to operate a DE program, as HHS does with other aspects of State Exchange operations on an annual basis. If there is information suggesting a State Exchange or one of its DE entities does not meet the requirements of § 155.221(j), we would notify the State Exchange and give them an opportunity to address the potential non-compliance. HHS intends to consider the development of new, additional tools to assist with oversight that could enhance transparency into compliance by State Exchanges, including their DE programs, with applicable Federal requirements. We may also consider use of other oversight tools and authority, including those under Part 155 of our regulations, as appropriate.

Comment: A few commenters suggested that CMS should implement even more stringent standards in the future, citing that it is especially important that DE entities provide consumers with clear, correct information about QHPs and insurance affordability programs, particularly that they display all plans in their cost comparison tools and not segregate plans that they do not sell.

Response: We agree with commenters that it is crucial that DE entities provide consumers with clear, correct information about QHPs and insurance affordability programs. The extension of certain standards applicable to DE entities assisting the FFEs' and SBE–FPs' consumers and applicants to DE entities operating in State Exchanges will help ensure that all DE entities consistently provide consumers with clear, correct information about their Exchange coverage options. The framework adopted in this final rule will do so by requiring that DE entities across all Exchanges meet minimum standards governing DE entity marketing and display of QHPs and non-QHPs, providing consumers with correct information and refraining from certain conduct, marketing of non-QHPs, website disclaimer language, and operational readiness.

While there are other standards under § 155.221 that are applicable to DE entity operations in FFE and SBE–FP States, for the reasons stated in the proposed rule (88 FR 82566) and earlier in this section of this final rule, we are extending to DE entities in State Exchanges the subset of critical standards that we believe help ensure proper eligibility determinations, protect against security breaches or incidents through implementation of operational readiness reviews, and minimize consumer confusion. At the same time, for the reasons stated in the proposed rule (88 FR 82567) and earlier in this section of this final rule, our approach preserves flexibility for State Exchanges that choose to implement a DE program to tailor their programs and establish their own standards with respect to certain aspects of their DE programs, such as operational readiness demonstrations and suspension frameworks. We believe this flexibility will help ensure that State Exchanges' DE programs and their standards are designed to meet the particular operational and business needs of the State Exchanges.

In the proposed rule, we sought comment on which of the current provisions at § 155.221 should or should not apply to State Exchanges and DE entities that assist consumers in State Exchanges. We continue to encourage specific feedback from interested parties, particularly from State Exchanges and DE entities operating in State Exchanges, on additional provisions in § 155.221 we should consider extending to State Exchanges and their DE entities or new standards that we should consider adopting for all Exchanges and DE entities in the future.

Comment: Several commenters opposed the extension of certain HHS standards under § 155.221 to State Exchanges and their DE entities, with a majority of those commenters stating that it generally hinders State Exchanges' flexibility in establishing their own rules that govern their DE programs. One commenter who supported the proposal stated it supports measures to protect necessary consumer safeguards to ensure access to consistent, reliable information from DE entities. However, this commenter suggested that CMS permit State Exchanges additional flexibility to implement measures that they

determine will best support those consumer safeguards to ensure consumers can more easily access enrollment assistance from web-broker DE entities. A few commenters stated that State Exchanges best understand their market dynamics and can be the most creative in regulating a DE program in their States. Further, a few commenters stated that the proposed approach imposes an unnecessary burden on State Exchanges, which will now have to develop policies and procedures to enforce the HHS DE standards extended to them and their DE entities under § 155.221(j). One commenter requested that CMS provide additional detail on why current State Exchange standards related to DE programs are insufficient.

Response: We agree that State Exchanges are best positioned to make certain judgments about how to regulate DE programs in their States, and the framework we are finalizing gives them flexibility to do so. For example, as we stated in the proposed rule (88 FR 82570), we recognize that it is important to provide State Exchanges with flexibility to adopt their own operational readiness requirements in a manner that is tailored to best meet the State-specific needs and requirements of the State Exchanges. Accordingly, we encouraged, but did not propose to require, State Exchanges to adopt the same operational readiness requirements and third-party auditor framework that HHS adopted under § 155.221(b)(4), (f), and (g) for DE entities assisting FFE and SBE–FP consumers. Similarly, we also encouraged, but did not propose to require, State Exchanges to adopt an immediate suspension framework, similar to § 155.221(e) that applies in FFE and SBE–FP States, that provides for the immediate suspension of a DE entity's ability to transact information with the State Exchange if the State Exchange discovers circumstances that pose unacceptable risk to the accuracy of the State Exchange's eligibility determinations, operations, or information-technology systems until the incident or breach is remedied or sufficiently mitigated to the State Exchange's satisfaction.

At the same time, however, we continue to believe, for the reasons stated in the proposed rule (88 FR 82566) and earlier in this section of this final rule, that it is important to extend to DE entities in State Exchanges—and, consequently, those State Exchanges that choose to implement a DE program—certain HHS standards that we identified as critical consumer protections to help ensure proper eligibility determinations, protect against security breaches or incidents through implementation of operational readiness reviews, and minimize consumer confusion. Still, we appreciate commenters' input on the degree of flexibility that should be afforded to State Exchanges, and we may consider that feedback to inform potential additional proposals or changes in this area in future rulemaking.

We recognize that this approach may impose a burden on State Exchanges that choose to implement DE programs, since they would newly be subject to the HHS standards being extended to them and their DE entities. We document that burden in the Regulatory Impact Analysis and Information Collection Requirement sections of this final rule.[202] However, we see potential for State Exchanges to realize benefits from implementing DE entity programs and adhering to the HHS standards being extended to them. For example, implementing DE programs would diversify and expand enrollment channels that State Exchange consumers could use to enroll in QHPs offered through the Exchange and apply for APTC/CSRs. As a result, more consumers may enroll in coverage offered on those State Exchanges, which would lead State Exchanges receiving a greater amount of user fees from issuers on their Exchanges. Furthermore, State Exchanges may benefit from reduced consumer traffic on their websites, given a shift in some consumer traffic to DE entity non-Exchange websites. That may reduce State Exchanges' website maintenance costs, as well as costs related to providing assistance to consumers with using those websites.

In response to the commenter who requested that we provide additional detail on why current State Exchange standards related to DE programs are insufficient, as we explained in the proposed rule (88 FR 82566) and noted earlier in this final rule, our regulations do not currently address whether and how DE entities may assist consumers and applicants with enrollment in QHPs and submission of applications for APTC/CSRs in State Exchanges, and to-date, no State Exchange has implemented a DE program. We pursued these proposals as we anticipate State Exchanges will be interested in exploring such programs to expand the available channels for consumers to apply for and enroll in Exchange coverage, and it is important for baseline consumer protections and Exchange operation safeguards to apply across all Exchange types.

Comment: One commenter stated that the proposal could be viewed as overreaching, exceeding the statutory authority granted to HHS under the ACA. The commenter suggested that the ACA allows significant leeway for State Exchanges to manage their Exchange programs, including the operation of web-brokers and DE programs. This commenter stated that by imposing rigid HHS standards, CMS may inadvertently hinder the growth and success of DE pathways.

Response: We appreciate the commenter's feedback. As we explained in the proposed rule (88 FR 82566), section 1312(e) of the ACA provides that the HHS Secretary shall establish procedures under which a State may allow agents, brokers, and web-brokers to enroll individuals in QHPs. The Secretary also has authority under section 1321(a) of the ACA to promulgate regulations with respect to the establishment and operation of Exchanges, the offering of QHPs through such Exchanges, and such other requirements as the HHS Secretary determines appropriate.[203] HHS previously leveraged these authorities to establish the existing agent, broker, and web-broker standards applicable in FFE and SBE–FP States, which are currently codified in §§ 155.220 and 155.221.[204] In addition, section 1413 of the ACA directs the Secretary to establish, subject to minimum requirements, a streamlined enrollment process for enrollment in QHPs and all insurance affordability programs. This authority, along with the Secretary's rulemaking authority under section 1321(a) of the ACA, was previously leveraged to establish the existing QHP issuer DE entity requirements applicable in FFE and SBE–FP States, which are codified in §§ 155.221, 156.265, and 156.1230.[205] We therefore disagree that the amendments to § 155.221 exceed the authority granted to HHS under the ACA.

We do not intend, or expect, for the extension of certain HHS standards applicable to DE entities assisting the FFEs' and SBE–FPs' consumers and applicants to DE entities operating in State Exchanges that choose to

[202] Also see 88 FR 82615 through 82617, 82625, and 82633.

[203] Section 1321(a)(1)(A), (B) and (D) of the ACA.

[204] See 77 FR 18334 through 18336; 78 FR 15533; 78 FR 54134; 79 FR 13837; 81 FR 12338; 81 FR 94176; 83 FR 16981 through 16982; 84 FR 17563; 85 FR 37248; 86 FR 24288; 87 FR 27388; and 88 FR 25917.

[205] See 77 FR 18425 through 18246; 78 FR 54124 through 54126; 81 FR 12309 through 12310; 81 FR 94152; 81 FR 94184; 83 FR 16981 through 16982, 17030; 84 FR 17521 through 17525, 17546 through 17547; and 86 FR 24209 through 24214.

implement a DE program to hinder the growth or success of DE pathways. Notably, to date, no State Exchanges have implemented DE programs. As we explained in the proposed rule (88 FR 82566) and earlier in this section of this final rule, we are extending to DE entities in State Exchanges (that choose to implement DE programs) the standards that we identified as critical safeguards to help ensure proper eligibility determinations, protect against security breaches or incidents through implementation of operational readiness reviews, and minimize consumer confusion. At the same time, for the reasons stated in the proposed rule (88 FR 82567) and earlier in this section of this final rule, our policies preserve flexibility for State Exchanges to tailor their DE programs and establish their own standards with respect to certain aspects of their DE programs, such as operational readiness demonstrations and suspension frameworks. We believe this flexibility will help ensure that State Exchange DE programs and their standards are designed to meet the particular operational and business needs of the State Exchanges, while also protecting consumers and safeguarding Exchange operations. We also note that if State Exchanges leverage HHS's review of third-party audits and determinations made as to DE entities' operational readiness and compliance with applicable requirements, as our approach encourages them to, that would alleviate the burden of operational readiness activities on DE entities in participating in State Exchanges and those State Exchanges, which would encourage DE entity participation in those State Exchanges.

Comment: A few commenters suggested that in the future, CMS should require State Exchanges to implement DE programs. These commenters stated that Exchange DE programs can have a positive impact on enrollment in QHPs offered through those Exchanges given recent enrollment growth among FFE and SBE–FP States, which can be attributed in some part to the DE program HHS adopted for FFEs and SBE–FPs. One commenter requested that CMS regularly publish statistics on the number of consumers who select a plan and enroll in QHPs offered on the FFEs or SBE–FPs through DE entity non-Exchange websites, to support the ability of interested parties, particularly State Exchanges, to assess whether DE may benefit their consumers in the future.

Response: We appreciate commenters' feedback and agree that DE programs can have a positive impact on enrollment in QHPs offered through Exchanges. As we explained in the proposed rule and earlier in this section of this final rule, section 1312(e) of the ACA provides that the HHS shall establish procedures under which a State may allow agents, brokers, and web-brokers to enroll individuals in QHPs. Accordingly, § 155.221(a), as finalized by this final rule, provides that Exchanges may permit QHP issuers and web-brokers that meet applicable requirements to assist consumers with direct enrollment in QHPs offered through the Exchange in a manner that is considered to be through the Exchange, to the extent permitted by applicable State law. We did not propose to require State Exchanges to implement a DE program and decline to adopt such a requirement in this final rule. As finalized, the amendments to § 155.221 establish HHS minimum standards to ensure key consumer safeguards also apply to State Exchange consumers if the State Exchange elects to operate a DE program.

We note that we published data on the impact of the DE program HHS adopted for FFE and SBE–FP States and encourage interested parties to review such data.[206] For example, we published a comparison of plan year 2020 and plan year 2021 open enrollment plan selection data by enrollment channel at *https://www.cms.gov/CCIIO/Resources/Forms-Reports-and-Other-Resources/Downloads/Impact-EDE-OEP-2021-Coverage.pdf.*

10. Failure To Reconcile (FTR) Process (§ 155.305(f)(4))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82571), we proposed changes and updates to § 155.305(f)(4). We proposed, in connection with the FTR process described in § 155.305(f)(4), to require all Exchanges, including State Exchanges, to send notices to tax filers for the first year in which they failed to reconcile APTC starting in PY 2025 as an initial warning to inform and educate tax filers that they need to file and reconcile or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive year. We are finalizing this policy as proposed, except that we have modified paragraph (f)(4)(i) and added paragraphs (f)(4)(i)(A) and (B) to clarify that an Exchange must either send a notice to a tax filer as described above or send a more general notice to an enrollee or their tax filer explaining that they are at risk of losing APTC. This modification does not impact any substantive rights or obligations described in the proposed rule, but rather clarifies in regulation text the method by which Exchanges can comply with the requirement.

As part of the 2024 Payment Notice (88 FR 25814 through 25816), we changed the FTR process such that an Exchange may only determine enrollees ineligible for APTC after a tax filer (or a tax filer's spouse, if married) has failed to file a Federal income tax return and reconcile their past APTC for two consecutive years (specifically, years for which tax data will be utilized for verification of household income and family size). However, in that rule, we did not impose a requirement for Exchanges to notify enrollees during the first year that the applicable tax filer failed to file and reconcile.

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule, we proposed to require that all Exchanges be required to send informative notices at least annually to tax filers who have failed to file and reconcile. Since Exchanges are prohibited from sending protected Federal tax information (FTI) to an individual who may not be the tax filer, only the FTR Open Enrollment notices sent *directly* to the tax filer may directly state that the IRS data indicates the tax filer failed to file and reconcile, consistent with standards applicable protection of FTI. An Exchange may not always be able to send FTR Open Enrollment notices directly to the tax filer because Exchange notices may be sent to the household contact or enrollee on the household's Exchange account or insurance policy, as is done in the Exchanges on the Federal platform, and this person is not necessarily the tax filer. Therefore, to comply with the prohibition on sending FTI (including information about failing to file and reconcile) in cases where the household contact or enrollee is not the tax filer, the Exchange may send notices that contain broad, general language regarding FTR referred to as ''combined notices.'' For example, an Exchange can send the same Exchange Open Enrollment Notice to multiple groups of consumers at risk for APTC discontinuation in the upcoming coverage year such as those flagged as having FTR status, those for whom the Exchange has received updated income information that suggests the consumers may have income too high to qualify for APTC, and those who did not permit the Exchange to check IRS data. Because the combined notices are sent to some

[206] *https://www.cms.gov/marketplace/resources/forms-reports-other.*

consumers who are currently unaffected by FTR, and not exclusively to individuals who are affected by FTR, they are generally not considered FTI under IRS rules and may be sent using the standard notice functionality without the protections required for FTI.

As background, Exchange enrollees whose tax filer fails to comply with current § 155.305(f)(4) are referred to as having failed to ''file and reconcile.'' These individuals are referred to as having FTR status, and the Exchanges conduct the FTR process to identify such individuals. In the 2024 Payment Notice (88 FR 25814 through 25816), we finalized a new process for Exchanges to conduct FTR to address concerns that the pre-existing FTR process requiring Exchanges to determine an enrollee ineligible for APTC after one year of having an FTR status could be overly punitive. Under the previous policy, enrollees occasionally had their APTC ended due to delayed data processing, in which case their only remedy was to appeal to get their APTC reinstated. Enrollees or their tax filers also may have been confused by or received inadequate education on the requirement to file and reconcile. HHS' and the State Exchanges' experiences with running FTR operations showed that Exchange enrollees often do not understand the requirement that their tax filer must file a Federal income tax return and reconcile their APTC or that they must also submit IRS Form 8962 to properly reconcile their APTC, even though both the single, streamlined application used by Exchanges on the Federal platform and the QHP enrollment process require a consumer to attest to understanding the requirement to file and reconcile. Note, the updated policy in the 2024 Payment Notice does not relieve tax filers from their requirement to reconcile each year nor any potential tax liability. By making these changes to the FTR processes in the 2024 Payment Notice and requiring Exchanges to determine an enrollee ineligible for APTC only after having an FTR status for two consecutive years (specifically, years for which tax data will be utilized for verification of household income and family size), Exchanges now have more opportunity to conduct outreach and send notices to enrollees or their tax filers for whom data indicate the tax filer has failed to file and reconcile and to prevent erroneous terminations of APTC, as well as to provide access to APTC for an additional year even when APTC would have been correctly terminated under the original FTR process.

There are limitations to these notices; notices that are sent directly to the tax filers and explicitly describe their FTR status must be compliant with IRS requirements for disclosing FTI, which can be a complex process and incompatible with some Exchanges' infrastructure. Alternatively, combined notices, which do not contain FTI, have limitations in that they do not explicitly inform the recipients that they are at risk of losing APTC due to the household tax filer being found to have failed to file and reconcile. However, both types of notices will create an opportunity for State Exchanges to educate enrollees or their tax filers on the requirement to reconcile their APTC with the PTC allowed. This will address the consumer confusion and knowledge gaps that were identified by both HHS and State Exchanges, which were key considerations in making the changes to the FTR process described in the 2024 Payment Notice, wherein tax filers now must be identified as FTR status for two years prior to having their APTC removed. With this additional year for tax filers to correct their FTR status, consumers will be better able to take appropriate action prior to losing their APTC and file and reconcile in response to these notices.

Under the policy finalized in this rule, Exchanges on the Federal platform will continue to send notices to enrollees and their tax filers for the year in which the tax filer has failed to reconcile APTC. Direct notices to the tax filer will provide an initial warning to inform and educate them that they need to file and reconcile, or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive tax year. A combined notice to the enrollee will provide more general information about the risk of losing APTC. State Exchanges will be required to send either one of these notices and may send a combined notice to the tax filer if desired. Our policy to codify this practice for Exchanges on the Federal platform and require State Exchanges to notify either an enrollee or their tax filer as described above, ensures that tax filers who have been determined to have FTR status for one year are adequately educated on the file and reconcile requirement, and have ample opportunity to address the issue and file and reconcile their APTC before they are determined to have FTR status for two consecutive years. This policy supports compliance with the filing and reconciling requirement under section 36B(f) of the Code and its implementing regulations at 26 CFR 1.36B–4(a)(1)(i) and (a)(1)(ii)(A), minimizes the potential for APTC recipients to incur large tax liabilities over time, and supports eligible enrollees' continuous enrollment in Exchange coverage with APTC by avoiding situations where enrollees become uninsured when their APTC is terminated. Additionally, this policy better aligns State Exchanges' Failure to Reconcile processes with that of the Exchanges on the Federal platform.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with modifications to require all Exchanges to either send informative notices directly to a tax filer alerting them of their FTR status, or to send informative notices that do not contain FTI either to the enrollee or their tax filer if through the income verification processes described in § 155.320, they have been found to have failed to reconcile their APTC for only one year. We are reorganizing the regulatory text at § 155.305(f)(4)(i) to create paragraphs (f)(4)(i)(A) and (f)(4)(i)(B) for ease of readability, and are clarifying that new paragraph (f)(4)(i)(B) describes the notifications Exchanges may send to an enrollee or their tax filer that informs them that they may be at risk of being determined ineligible for APTC in the future, but does so without conveying FTI. We are also clarifying in this final rule that we will provide Exchanges with additional guidance on implementation, in particular around notice language, which is informative to the consumer without sharing protected FTI. We summarize and respond to public comments received on the proposed policy below.

Comment: The majority of commenters supported the proposal requiring an Exchange to notify enrollees and their tax filers of their FTR status when they are identified as having failed to reconcile for one year. Several of these commenters in particular cited its positive impact on continuity of coverage for consumers enrolled in Exchange coverage.

Response: We agree that the proposed FTR policy will have a positive impact on enrollee retention of APTC and coverage by ensuring enrollees and their tax filers are well informed of the tax reconciliation requirement and/or of a potential FTR status.

Comment: A few commenters opposed the proposal requiring all Exchanges to check FTR and send FTR notices on an annual basis to enrollees, or their tax filers, who have an FTR status. These commenters stated that it is prohibitively difficult to send notices

containing protected FTI to enrollees or their tax filers. One of these commenters agreed with the importance of informing tax filers of the tax credit reconciliation requirement but disagreed with the proposed method. This commenter stated that Exchanges and their consumers are better served by flexible real-time education, rather than annual mandatory notices.

Response: We recognize the complexity of sharing FTI with enrollees, which is why the proposed requirement allows for the use of combined notices. These combined notices may contain broad, general language, and can be sent to multiple groups of consumers at risk for APTC discontinuation in the following coverage year. We currently provide samples of such combined notices amongst other resources online at *Marketplace.cms.gov.* Additionally, we will provide technical assistance, guidance, and updated sample notice language to Exchanges in advance of implementation for plan year 2025.

While we are finalizing the requirement for Exchanges to send on an annual basis FTR notices to consumers identified as having an FTR status, we appreciate that there are other approaches to educating consumers on the FTR requirements. We wish to note that Exchanges will have flexibility in the notice content and process. While annual notices are a minimum requirement, Exchanges are welcome to expand on these with real-time education and other consumer outreach.

Comment: A few commenters opposed this proposal, citing the need for State flexibility in Exchange operations.

Response: Exchanges will still have flexibility in the manner of sending and content of FTR notices, but this policy provides important consumer protections by ensuring that enrollees and/or their tax filers are at a minimum informed of the APTC reconciliation requirement as well as the potential for loss of APTC eligibility each year. While Exchanges will have the opportunity to provide additional outreach and education, we see these annual notices as a minimum standard.

Comment: One commenter opposed this proposal, stating that they did not consider Exchanges to be the optimal choice to send annual FTR notices. This commenter suggested that the IRS would be a better agency to create and send out these notices, in particular due to the protections around FTI.

Response: The IRS has existing processes under which tax filers may be contacted if they file a tax return without reconciling APTC. However, Exchanges are also well-suited to send these FTR notices. Exchanges are already equipped to send a variety of different notice types to QHP enrollees, both through mail and Exchange portals. Furthermore, we know through the ''Annual Eligibility Redetermination Plans'' shared by State Exchanges with HHS that prior to HHS pausing FTR operations for all Exchanges in 2020 due to the effects of the COVID–19 public health emergency, the majority of State Exchanges were already sending out either direct or combined FTR notices to enrollees or their tax filer, similar to the ones being described in this rule. Exchanges will be able to utilize these existing structures to develop and send FTR notices in compliance with this rule. Additionally, Exchanges are allowed to send out informative, combined notices that do not contain protected FTI.

Comment: Many commenters expressed support for the proposal, or support for the intention of the proposal, but also expressed the need for CMS to provide further guidance and support on best-practices and clear, actionable language for the notices. In particular, they requested that HHS provide guidance in developing the combined notices that do not contain protected FTI. Several of these commenters shared concerns that since these notices cannot explicitly state that the enrollee or their tax filer has FTR status due to FTI privacy rules, the notices may be confusing or ineffective, in particular since they will be warning about the possibility of losing APTC as far as one year out. Several of these commenters requested that HHS refine this language and provide templates to other Exchanges to ensure that notices are consistent. One of these commenters also suggested that these consumers would not be able to gain clarity by contacting the Exchange call-center, as its employees are similarly bound by rules surrounding the disclosure of FTI.

Response: We appreciate these comments and acknowledge that the tax reconciliation requirement is complex and can be complicated to convey to consumers. We are developing updated FTR notices for enrollees or their tax filers who are found with a one-year FTR status as well as for those found with a two-year FTR status. These notices will be posted publicly at *Marketplace.cms.gov* once finalized, in advance of implementation for the PY 2025 open enrollment period. Exchanges will be able to use this notice language to train and educate their call-center staff on different ways to educate consumers of the APTC reconciliation requirement, without disclosing FTI. We will also work with Exchanges to provide technical assistance and guidance in advance of the restart of FTR operations.

In the meantime, sample notices that were sent out to individuals with FTR status prior to the pause in 2020 are available at *Marketplace.cms.gov* and can help guide Exchanges as they prepare for implementation and further develop their own notices. We also would like to note that many State Exchanges have already developed FTR notices and noticing processes that were utilized prior to the FTR pause.

Comment: A few commenters expressed support for the current proposal, acknowledging that educating consumers through annual FTR notices protects them and their coverage. However, these commenters also stated that the FTR process overall is flawed, overly punitive to consumers, and a threat to continuity of coverage. As such these commenters urged its repeal.

Response: We believe that the changes finalized in the 2024 Notice of Benefit and Payment Parameters, along with the changes finalized in this rule, properly balance consumer protections and program integrity concerns, and therefore support that we should continue to improve the FTR process rather than repeal it entirely.

11. Verification Process Related to Eligibility for Enrollment in a QHP Through the Exchange (§ 155.315(e))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82572), we proposed changes and updates to § 155.315. We proposed to amend § 155.315(e) by revising paragraph (e)(1) to permit all Exchanges to accept an applicant's attestation of incarceration status and paragraph (e)(2) to allow Exchanges to electronically verify a consumer's current incarceration status using an HHS-approved verification data source. We also proposed to amend the reference in paragraph (e)(3) to reflect that if an Exchange verifies an applicant's attestation of incarceration status using an approved data source and the attestation is not reasonably compatible with the information provided from the stated data source or other information provided by the applicant or in the records of the Exchange, then the Exchange must follow the data matching issue (DMI) process set forth in § 155.315(f). We noted in the proposed rule that if the proposed policy was finalized, Exchanges using the Federal eligibility and enrollment platform, including SBE–FPs, that currently use the incarceration verification data source

offered through the Federal Data Services Hub (the ''Hub'') would be able to accept consumer attestation of incarceration status without further verification of incarceration status.

As background, section 1312(f)(1)(B) of the ACA states that an individual shall not be treated as a qualified individual for enrollment in a QHP if, at the time of enrollment, the individual is incarcerated, other than incarceration pending the disposition of charges. Sections 155.315(e) and (e)(1) currently state that Exchanges must verify incarceration status with a data source approved by HHS and deemed accurate, current, and offering less administrative complexity than paper verification. When an individual's incarceration attestation conflicts with information from an approved data source or other information provided by the applicant or in the records of the Exchange, § 155.315(e)(3) requires Exchanges to create a DMI as outlined in § 155.315(f). However, if an approved data source is unavailable, an Exchange may accept attestation of incarceration without further verification under § 155.315(e)(2).

Under proposed paragraphs (e)(1) and (2), an Exchange would be able to accept a consumer's attestation of incarceration status or propose an electronic data source for incarceration verification to HHS for approval and use that approved source to verify incarceration status. Should a State Exchange choose to propose use of an alternative electronic data source for verifying incarceration status, HHS would review such proposals in accordance with the process under § 155.315(h), through which HHS would make a determination based on the proposed use of the alternative data source and whether it minimizes administrative costs and burdens on individuals while it maintains accuracy and minimizes delay. We proposed at paragraph (e)(3) that if an Exchange verifies an applicant's attestation of incarceration status using an approved data source as provided under proposed paragraph (e)(2), to the extent that the applicant's attestation is not reasonably compatible with information from the approved data source or other information provided by the applicant or in the records of the Exchange, the Exchange would be required to follow the DMI procedures at § 155.315(f).

In the Exchange Establishment Rule (77 FR 18362), we recognized that there may be challenges in the availability of electronic incarceration verification data but believed that so long as an incarceration verification data source existed that has been approved by HHS, it should be used to verify incarceration status. We also recognized that requesting consumer attestation of incarceration status and accepting such attestation without further verification when an accurate data source was unavailable is necessary since incarceration status is a statutory standard for eligibility to enroll in a QHP.

Exchanges using the Federal eligibility and enrollment platform, including SBE–FPs, currently verify whether an applicant is incarcerated through the Hub by using the Social Security Administration's (SSA) Prisoner Update Processing System (PUPS). PUPS is currently maintained by SSA and is the only national database that reflects information from Federal, State, and local correctional records. Our experience administering the Federal eligibility and enrollment platform, along with the experience from the State Exchanges that have used the PUPS data, have demonstrated that verifying incarceration data using PUPS has resulted in a high number of DMIs, few of which identify QHP applicants who are incarcerated. For example, we conducted an internal study and found that out of 110,802 incarceration DMIs generated between PYs 2018 to 2019, 96.5 percent of them were resolved in favor of the applicant. More importantly of those 3,878 applicants whose DMIs were not resolved in their favor (3.5 percent of 110,802), we found that only a total of 2,469 applied for QHP coverage during PYs 2018 and 2019. Of these 2,469 ineligible applicants, 950 applicants were released from either prison or jail within 90 days after the application submission date. Excluding these individuals leaves 1,519 QHP-ineligible individuals, of which 921 applicants effectuated coverage (that is, made the binder payment), which is allowed while awaiting DMI clearance, thus resulting in an improper APTC payment. An average annual APTC per individual of $1,569 was estimated for the 921 QHP ineligible applicants with effectuated policies.[207] This yields potential improper payments of approximately $361,262.25 over 3 months. Because only a very small number of incarcerated individuals apply to enroll in QHPs, verifying incarceration status using PUPs and conducting the DMI process outlined at § 155.315(f) results in Exchanges saving only a fraction of improper overpayment of APTC, and those savings are dwarfed by the administrative costs imposed by using PUPs and conducting the DMI process.

We conducted a cost-benefit assessment and determined that the cost to verify incarceration status electronically far exceeds potential savings. Should the Exchange conduct an electronic incarceration verification check, such as a verification check of a consumer's attestation using PUPS data, it would cost more than $4 million to operate yearly, along with a one-time implementation startup cost of approximately $200,000. Furthermore, connecting to an alternative incarceration data source, such as PUPS, and conducting the DMI process outlined at § 155.315(f) can be very costly to Exchanges. In PY 2019, nearly 38,000 out of 78,000 applicants with an incarceration DMI submitted documents to attempt to resolve the incarceration DMI. To process DMIs, the Exchange incurs costs for the eligibility-verification contractor on a fixed-price basis totaling about $0.57 million per year for verification of incarceration. This figure does not include other costs related to sending notices to consumers, processing appeals, and handling call center transactions. Our 2019 study concluded that those who receive an incarceration DMI are statistically likely to be eligible to enroll in a QHP as the applicants were released from either prison or jail within 90 days after the application submission date. However, an unresolved incarcerated DMI can result in a complete loss of coverage.

The processes of notifying consumers of their DMIs and resolving them have been burdensome and has negatively impacted the consumer experience. When an incarceration DMI is generated, applicants are required to provide documentation to show that they are no longer incarcerated.[208] This creates a significant enrollment burden for formerly incarcerated individuals, a population comprised of a significant number of people with disabilities.[209]

[207] This per-person per-year estimate was calculated by multiplying the monthly APTC benefit that each ineligible and effectuated applicant was estimated to receive in their FFE application by the maximum number of months the applicant could have been enrolled in a QHP while still incarcerated and pending DMI clearance. For open enrollment applications, an enrollment start date of January 1 was used (45 CFR 155.410). For special enrollment period applicants, the previous coverage effective date rules were used where if the applicant applied between the 1st and 15th of the month, an enrollment start date of the 1st of the following month was used. If the applicant applied after the 16th of the month, an enrollment start date of the 1st of the month 2 months following the application month was used. 45 CFR 155.420.

[208] *HealthCare.gov*. (n.d.) How do I resolve a Data Matching Issue. Dept. of Health and Human Services. *https://www.healthcare.gov/help/how-do-i-resolve-an-inconsistency/#incarceration-status*.

[209] Apel, R., and Sweeten, G. (2010, Aug. 1). The Impact of Incarceration on Employment during the

Continued

Many documents that can prove incarceration status cannot be obtained without an unexpired proof of identity document, and most cannot be obtained without submitting non-refundable payments. Incarceration may inhibit one's financial savings, and formerly incarcerated individuals are less likely to secure employment.[210]

These findings support our beliefs that incarcerated individuals apply for QHP coverage at very low rates, and that their applications are considered to be a very low program integrity risk for Exchanges, which do not warrant always conducting an extensive incarceration verification check. We also believe that previous guidance to conduct incarceration status verification [211] may have contributed to inequity in the Exchange population, as Black adults were imprisoned at five times the rate for White adults [212] and are more likely to face systemic obstacles hindering their ability to secure employment post incarceration.[213]

Given these concerns, we proposed to amend § 155.315(e) by revising paragraph (e)(1) to permit all Exchanges to accept consumer attestation of incarceration status without further electronic verification. We proposed to revise paragraph (e)(2) to permit Exchanges to verify consumer incarceration status using an HHS-approved verification data source that is current, accurate, and minimizes administrative costs and burdens. We believe these policies would improve the Exchange enrollment process, reduce operational challenges for Exchanges, and reduce burdens on applicants, all while maintaining program integrity and ensuring that the alternative incarceration verification data source that may be used by Exchanges is not unduly burdensome or costly to administer.

We also proposed changes to paragraph (e)(3) to reflect that if an Exchange verifies an applicant's attestation of incarceration status using an approved data source, and the attestation is not reasonably compatible with the information from the approved data source or other information provided by the applicant or in the records of the Exchange, the Exchange must then follow the DMI process set forth in § 155.315(f).

We sought comment on this proposal, particularly from State Exchanges and other users of PUPS data through the Hub. We also expressed particular interest in comments about whether State Exchanges intend to continue using PUPS data to verify incarceration status. We also sought input from any State Medicaid agency that uses PUPS data available through the Hub.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to require Exchanges to start accepting consumer attestation of incarceration status without further verification or for Exchanges to use a data source for incarceration verification approved by HHS. We summarize and respond to public comments received below.

Comment: Many commenters supported the proposal to amend the current process of incarceration status verification by accepting consumer attestation or through the verification of incarceration status with an alternative data source. Commentors commended CMS for acknowledging the barriers faced by justice-involved populations and taking steps to minimize inequitable access to health insurance coverage.

Response: We agree that the policy to accept consumer attestation of incarceration status without further electronic verification will reduce administrative costs and burdens associated with verification of incarceration status. Additionally, the policy allows Exchanges the flexibility to continue verification of incarceration status using an HHS-approved data source that is current, accurate, and reduces administrative costs and burdens. We believe that this policy will equitably improve access to health care coverage for justice-involved individuals.

Comment: One commenter supported the recommendation that CMS provide educational materials and outreach for those leaving the incarceration facilities to be better informed about their pathways to enrolling in health care.

Response: We thank the commenter for this recommendation and agree that educational materials and outreach should be made available for those leaving the incarceration facilities. We have resources available on *HealthCare.Gov* and will continue to make updates as needed for accuracy.

Comment: One commenter recommended using commercially available incarceration data to connect with soon-to-be-released individuals with social services.

Response: We thank the commenter for bringing up the commercially available data that connects people with social services after their release and agree that such service could be useful. We will take this recommendation into consideration for future rulemaking.

Comment: One commenter asked CMS to clarify the process for HHS to approve a data source, including by listing the criteria that HHS will use to assess whether an alternative data source should be approved.

Response: We decline to specify additional criteria HHS will use to approve an alternative data source beyond those included in the proposal: that the data source provide data that are current and accurate, and that its use minimizes administrative costs and burdens. We also note that a data source that does not timely report release from incarceration for recently paroled individuals is unlikely to meet HHS' standard. We would need to conduct additional market research and secure funding for the purposes of identifying and utilizing an alternative incarceration verification data source that is approved for all Exchanges and Medicaid and CHIP agencies. Any State Exchange that is interested in using alternative data sources for incarceration verification should submit its proposal to HHS for review, as an update to their Exchange Blueprint, as described in § 155.315(h).

Comment: Some commentors stated that the proposed rule contradicts the recently published GAO guidance [214] on verification of self-attestation which was published to implement President Biden's Executive Order [215] for reducing improper payments, identity theft, and benefit fraud, issued in response to fraud, waste, and abuse during the COVID–19 Public Health Emergency.

Response: In alignment with GAO's published guidance to reduce fraud, we provided extensive cost benefit analysis in the proposed rule to outline the

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Transition to Adulthood. Social Problems, 57(3), 448–479. *https://doi.org/10.1525/sp.2010.57.3.448.*

[210] *Id.*

[211] 45 CFR 155.315(e).

[212] Nellis, A. (2021). *The Color of Justice: Racial and Ethnic Disparity in State Prisons.* The Sentencing Project. *https://www.sentencingproject.org/app/uploads/2022/08/The-Color-of-Justice-Racial-and-Ethnic-Disparity-in-State-Prisons.pdf;* Sabol, W.J., and Johnson, T.L. (2022). *Justice System Disparities: Black-White National Imprisonment Trends, 2000 to 2020.* Council on Criminal Justice. *https://secure.counciloncj.org/np/viewDocument?*

[213] Sirios, C., and Western, B. (2017, Feb.). *Racial Inequality in Employment and Earnings after Incarceration.* Harvard University. *https://scholar.harvard.edu/files/brucewestern/files/racial_inequality_in_employment_and_earnings_after_incarceration.pdf.*

[214] Government Accountability Office. (2022, Feb. 10). Emergency Rental Assistance: Additional Grantee Monitoring Needed to Manage Known Risk. *https://www.gao.gov/assets/gao-22-105490.pdf.*

[215] *https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/02/fact-sheet-president-bidens-sweeping-pandemic-anti-fraud-proposal-going-after-systemic-fraud-taking-on-identity-theft-helping-victims/.*

minuscule amount of improper payments made to incarcerated individuals, contrasted with the large administrative costs and burdens to verify incarceration status. Based on this analysis, we estimate that there would be expected cost savings for Exchanges of approximately $20,317,000 resulting from this policy. This means that the finalized policy change to verify incarceration status will save taxpayer funds. Within the cost benefit analysis, we provided additional information on the potential costs of investing in an alternative data source to verify incarceration.

Comment: One commenter asked CMS to clarify whether Exchanges that currently using PUPS comply with the proposal.

Response: As the PUPS data that is made available through the Federal Data Services Hub has been an existing HHS-approved data source for incarceration verification, State Exchanges may consider the PUPS data current, accurate, and its use to minimize administrative costs and burdens for their State without seeking approval from HHS. State Exchanges that currently use the PUPS data may continue using this data source for incarceration verification, should they choose to do so, without seeking re-approval from HHS. We also encourage any State Exchange that is currently using this data source to conduct a similar evaluation as we described in the proposed rule (for the FFE and SBE–FPs), to determine whether continued use of the PUPS data is a cost-effective approach for incarceration verification. We will provide technical assistance to any State Exchange that is currently using PUPS data through the Federal Data Services Hub that wishes to modify its approach to instead accept self-attestation or to use an alternative data source for incarceration verification.

Comment: One commenter asked for an amendment to the Medicare regulation at 42 CFR 411.4(b) which describes when an individual is in custody to align with post-incarceration coverage policies in the Exchange and Medicaid.

Response: We thank the commenter for bringing this to our attention but note that the comment is outside the scope of this rule.

Comment: One commenter supported the proposal and noted that cost-benefit analysis for the proposed change is sufficient but advised that CMS should amend the proposed rule to omit any mentions of health and racial equities as it ''might fall to an arbitrary and capricious challenge under the Administrative Procedures Act''.

Response: HHS has the authority to modify the incarceration verification process under section 1411(c)(4)(B) of the ACA, as well as under our general rulemaking authority in section 1321(a) of the ACA. We maintain that we have provided several non-arbitrary rationales for the policy described in this rule, including that mandatory verification of incarceration status is costly to taxpayers, burdensome for applicants, and reduces access to health care for justice-involved populations which reduces health and racial equity.

Comment: A few commenters appeared unclear about the proposal and vaguely opposed it, claiming that HHS did not provide enough evidence as to why current practices are insufficient, the proposal would increase the cost of health insurance, and the proposal would not provide Exchanges with sufficient operational flexibility.

Response: We clarify that the policy allows Exchanges to start accepting consumer attestation of incarceration status without further verification unless the Exchange chooses to verify consumer attestation using a data source approved by HHS to be current and accurate and minimize administrative costs and burdens. Exchanges must generate a DMI if a mismatch between consumer attestation and the data is present. Additionally, there is no basis to believe this rule will increase the cost of health insurance. As demonstrated in the cost benefit analysis provided in the rule, it will be cost effective for Exchanges to accept consumer attestation of incarceration status without further verification, and Exchanges that decline to use an alternative data source will not incur additional costs to verify incarceration status, as explicitly demonstrated in the RIA section of the rule. Finally, we believe that we provided sufficient flexibility in this rule as State Exchanges may elect to accept attestation of incarceration status or use an alternative data source approved by HHS.

12. Verification Process Related to Eligibility for Insurance Affordability Programs (§ 155.320)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82574), we proposed to reinterpret State Exchange and State Medicaid and Children's Health Insurance Program (CHIP) agency use of the Federal Data Services Hub (Hub) to access and use the income data provided by the optional Verify Current Income (VCI) Hub service as a State Exchange or a State Medicaid and CHIP agency function, because these State entities use this optional service to implement eligibility verification requirements applicable to them. While we proposed to redesignate use of the VCI Hub service by State Exchanges and State Medicaid and CHIP agencies as a State function, HHS would continue to maintain contracts that make this service available through the Hub for State Exchange and State Medicaid and CHIP agency use as part of its ongoing implementation of sections 1411 and 1413 of the ACA. We proposed to amend § 155.320(c) to reflect this reinterpretation for the Exchanges. Under this proposal, States would pay annually in advance for the State Exchanges and Medicaid and CHIP agencies' anticipated utilization of the optional VCI Hub service and be required to reconcile with HHS on an annual basis the anticipated utilization of CSI data provided by the VCI Hub service with the actual utilization. In the alternative, we proposed that HHS would invoice States on a monthly basis for their actual utilization of CSI data provided by the VCI Hub service after that utilization occurs. We noted that State Medicaid and CHIP agencies would be eligible for Federal matching for the cost of this service, as described in this section.

Under our proposal, Exchanges and State Medicaid and CHIP agencies may opt to continue to use the VCI Hub service to support their eligibility verification processes for Exchange QHP coverage or Medicaid and CHIP if they pay for the cost of their use of the service. For instance, Exchanges would still be able to use this current income information to verify a tax household's annual income attestation if they are unable to verify income using SSA Title II data, IRS income tax data, or a combination of both SSA and IRS data, in determining eligibility for APTC. Because Exchanges and State Medicaid and CHIP agencies are permitted, but not required to use the VCI Hub service to fulfill the mandatory eligibility determination requirements imposed on them, accessing the CSI data via the VCI Hub service should be characterized as an Exchange or State Medicaid and CHIP agency function.

Consistent with section 1413 of the ACA, HHS would continue to provide access to optional data sources through the Hub to support the streamlined application processes. However, as these functions would be considered Exchange or State Medicaid and CHIP agency functions, and not HHS functions, HHS would no longer fund Exchange or State Medicaid and CHIP agency use of these sources and would

only provide access to States who paid for their use of the service. HHS bears a cost for Exchange and State Medicaid and CHIP agency use of the CSI data accessed through the VCI Hub service. Under the proposed interpretation, State Exchanges and State Medicaid and CHIP agencies would be required to pay for their use of the VCI Hub service. However, where applicable, State costs for State Medicaid and CHIP agencies may be eligible for Federal matching funds at the 75 percent match of the cost of a State Medicaid agency's utilization of the VCI Hub service, as outlined in 42 CFR 433.116, and match CHIP costs at a State's enhanced Federal Medical Assistance Percentage (FMAP).

Since the VCI Hub service was established in 2013 for use by both Exchanges and State Medicaid and CHIP agencies, utilization of the VCI Hub service has grown significantly over time, both in the number of State Exchanges and State Medicaid and CHIP agencies using the service, and the number of applicants and beneficiaries that require income verification as Exchange populations have increased over time. During the first open enrollment in 2013, only the Exchanges on the Federal platform, two State Exchanges, and eight State Medicaid and CHIP agencies used data from the VCI Hub service for eligibility determinations. In that first year, the Exchanges on the Federal platform initiated about 88 percent of all requests, or ''pings,'' to the VCI Hub service for income verification. In the past decade, more State Medicaid and CHIP agencies and State Exchanges have started using the VCI Hub service; as of June 2023, 34 States, including the District of Columbia and Puerto Rico, use the VCI Hub service for their State Medicaid and CHIP programs, and 10 of those States also use the service to verify QHP eligibility for their State Exchanges. Our analysis shows that as of January 2024, over 76 percent of monthly pings to the VCI Hub service were from State Medicaid and CHIP applications, including renewals of eligibility for Medicaid or CHIP coverage, and the Exchanges on the Federal platform now account for less than 5 percent of the total volume.[216]

If new State Medicaid and CHIP agencies or State Exchanges are permitted to request access to the VCI Hub service, we forecast that in the next 5 years, transaction volume to the VCI Hub service would increase by over 17 percent. These trends in utilization have provided us with a clear picture of the primary uses and utilizers of the VCI Hub service. Specifically, we have learned that the queries submitted by States to the VCI Hub service have been for income verification by State Medicaid and CHIP agencies to determine Medicaid and CHIP eligibility, and by State Exchanges to assess or determine Medicaid and CHIP eligibility and determine APTC eligibility. Accordingly, we now believe this activity that has been categorized as an HHS function would be better categorized as: (1) a State Medicaid and CHIP agency eligibility determination function under title XIX or title XXI of the Act when the determination is initiated by a State Medicaid and/or CHIP agency; and (2) as an Exchange function when the determination is initiated by an Exchange.

While we believe the utilization of this optional data source is an Exchange or State Medicaid and CHIP agency function, making the optional data sources available through the Hub is consistent with the requirements at sections 1411 and 1413 of the ACA related to establishment and participation in a coordinated eligibility and enrollment system for all insurance affordability programs. As such, to facilitate Exchanges' and States Medicaid and CHIP agencies' access to this optional CSI data that is available through the VCI Hub service, HHS will continue to maintain contracts that make access to these resources available through the Hub for Exchange and State Medicaid and CHIP agency use.

In making this proposal, we noted that while use of the VCI Hub service is an integral part of the eligibility determination process in most States, Exchanges and State Medicaid and CHIP agencies may have access to other data sources to verify income. As noted previously, we are aware that many States have access to other comprehensive data sources, such as State quarterly wage data. Generally, as dictated by individual State law, employers are required to report employee information such as payroll and unemployment insurance contribution data to a State department, such as the State Department of Labor or a similar office. In place of the optional VCI Hub service, State Exchanges continue to have flexibility under 45 CFR 155.315(h) and 155.320(c)(3)(iv) to use an alternative verification source, like State wage data, when income is not verified using IRS tax data or SSA title II data. We encouraged State Exchanges, State Medicaid and CHIP agencies, and other interested parties, to submit comments regarding any operational burden, policy, or budget challenges regarding access to other State data sources of the proposed change.

As part of our consideration of the policies in this rulemaking, we considered requiring State Medicaid and CHIP agencies and State Exchanges to obtain their own contracts to administer their CSI data usage; however, we had concerns that these services cannot be procured reasonably and expeditiously, which would undermine the system we have implemented under section 1413 of the ACA. We also believe that there may be benefits to the State Medicaid and CHIP agencies and State Exchanges that prefer to use the CSI data accessible through the VCI Hub service in their States. Therefore, we proposed to retain optional access to the VCI Hub service on behalf of State Medicaid and CHIP agencies and State Exchanges that prefer to continue to use this service and are willing to pay for their CSI data usage. Under this policy, State Medicaid and CHIP agencies and State Exchanges can choose to discontinue their use of the CSI data accessible through the VCI Hub service.

Given these considerations, we proposed to amend 45 CFR 155.320(c)(1) to add new paragraph (c)(1)(iii) to require that beginning July 1, 2024, State Exchanges would be required to pay for 100 percent of their utilization of the CSI income data provided by the VCI Hub service.[217] We refer readers to the proposed rule (88 FR 82576) for an explanation of implementation of this policy.

Similarly, we proposed to require that beginning July 1, 2024, States pay in advance for their Medicaid and CHIP utilization of the optional, and not required, VCI Hub service to fulfill their Medicaid and/or CHIP eligibility determination requirements. As noted above, consistent with the requirements at section 1413 of the ACA (related to establishment and participation in a coordinated eligibility and enrollment system for all insurance affordability programs), which is incorporated into the Medicaid and CHIP statutes at sections 1943(b)(3) and 2107(e)(1), respectively, of the Act, in order to facilitate States' access to this optional CSI data that is available through the VCI Hub service, we would continue to

[216] In the proposed rule (88 FR 82576), we reported that as of March 2023, over 70 percent of monthly pings to the VCI Hub service were from State Medicaid and CHIP applications, including renewals of eligibility for Medicaid or CHIP coverage, and the Exchanges on the Federal platform accounted for less than 10 percent of the total volume.

[217] The FFEs' and SBE–FPs' costs for accessing these services would be covered by the FFEs' and SBE–FPs' user fees.

maintain contracts that enable States to efficiently access CSI data through the VCI Hub service. However, under our proposal, States would be required to pay the cost incurred by HHS when the State requests CSI data through the VCI service offered by the Hub.

In the alternative, HHS also considered whether it could invoice States on a monthly basis for their actual utilization of CSI data provided by the VCI Hub service after that utilization occurs. If appropriate, this alternative policy could be adopted in the final rule. We considered these mechanisms for implementing State Exchange and Medicaid and CHIP agency payments for use of the VCI Hub service and solicited comments on whether a different implementation approach would be more efficient or otherwise preferable. We refer readers to the proposed rule (88 FR 82576 through 82577) for an explanation of implementation of this policy and an alternative payment structure.

Finally, we proposed that the interpretation characterizing use of the VCI Hub service as a function of State Exchanges and Medicaid and CHIP agencies and not an HHS function be effective on July 1, 2024. We recognize that this implementation date may be difficult for States, especially those with biennial budget cycles. However, given our determination that eligibility verifications using CSI data by State Exchanges and Medicaid and CHIP agencies is most appropriately characterized as a function of these agencies and not an HHS function, we believe it is appropriate to move forward with this change as expeditiously as possible, while giving States some time to plan for the change. For this reason, we proposed a July 1, 2024, effective date for this provision.

We sought comment on these proposed changes, including whether we should make this interpretation effective as of July 1, 2024, or a different date. We were interested in learning whether State Exchanges and Medicaid and CHIP agencies would seek to cease or restrict their use of the VCI Hub service, possibly using it as a last resort, and what impact, if any, might these proposed changes have on the amount of time it takes applicants to verify their income or the time it takes for States to make an eligibility determination. We also sought comment on the extent to which States may be interested in potential avenues to reduce operational burdens or address budget challenges facing State Exchanges and Medicaid and CHIP agencies. Namely, we were interested in whether States would be interested in opportunities to pay an additional fee that would allow them to reuse VCI Hub service verification results across multiple Federally-funded and State-administered human service programs (with cost allocation across those programs); whether States have separate, direct access to the same or similar source of VCI Hub services, and the cost of such direct access; and whether States anticipate that reuse of verification data, coupled with cost allocation across programs, would reduce operational burdens or address budget challenges facing State Exchanges and Medicaid and CHIP agencies.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to reinterpret State Exchange and State Medicaid and CHIP agency use of the Hub to access and use the income data provided by the optional VCI Hub service as a State Exchange or a State Medicaid and CHIP agency function, and that beginning July 1, 2024, State Exchanges and State Medicaid and CHIP agencies will be required to pay for the costs of their access to and use of the VCI Hub service. We are also finalizing the proposal with a modification: rather than requiring States to pay in advance for their use of the VCI Hub Service, HHS will invoice States monthly for the amount the State must pay to reimburse HHS for the costs of their access and actual utilization of CSI income data from the prior month. Specifically, HHS will invoice States on a monthly basis for their actual utilization of the CSI income data accessed through the VCI Hub Service, as well as an administrative fee to account for any direct or indirect costs of making CSI income data accessed through the VCI Hub service available to Exchanges and State Medicaid and CHIP agencies, in accordance with the Intergovernmental Cooperation Act and interpretive OMB Circulars A–97 and A–25.[218] As such, we have revised the regulatory text to remove language stating that State Exchanges must pay for their utilization of the VCI Hub service annually and in advance, as well as references to reconciliation. We summarize and respond to public comments received on the proposed policy below.

Comment: One commenter supported our proposal to reinterpret State Exchange and State Medicaid and CHIP agency use of the VCI Hub service to access CSI income data as a State Exchange or a State Medicaid and CHIP agency function. The commenter stated that being able to access CSI income data through the Hub would enhance the accuracy and efficiency of eligibility determinations for either Exchange QHP or Medicaid and/or CHIP coverage, while also improving the overall accuracy and protecting the integrity of the income verification process for eligibility for either of these programs.

Response: We agree that use of the VCI Hub service and the CSI income data accessed through the service is an integral part of the eligibility determination process in most State Exchanges and State Medicaid and CHIP agencies and provides an optional means to improve the overall accuracy of income verifications, especially in cases where an applicant's annual or current income is not verified using other Federal data sources, such as IRS income tax data or SSA Title II income. We also agree that access and use of the VCI Hub service ensures the program integrity of Exchanges, as the income data accessed through the VCI Hub service can ensure that applicants who are eligible to receive APTC do so. Because of these benefits to both State Exchanges and State Medicaid and CHIP agencies, HHS will continue to maintain existing contracts that make access to these resources available through the Hub for State Exchange and State Medicaid and CHIP agency use, as HHS has over the course of the last decade. Additionally, State Exchanges and State Medicaid and CHIP agencies that do not have access to the VCI Hub service and wish to begin utilizing and paying for CSI income data accessed through the VCI Hub service may do so by submitting a request to HHS for review and approval to connect to the VCI Hub services, as States are not permitted to begin using the service without prior HHS approval. However, even though CSI income data accessed through the VCI Hub service is optional, we still believe that it is appropriate that this service be considered a State Exchange or State Medicaid and CHIP agency function.

Comment: Several commenters opposed the proposal to require State Exchanges and State Medicaid and CHIP agencies to pay for their utilization of the CSI income data accessed through the VCI Hub service as they noted that it would negatively impact consumers in various ways. For example, some commenters were concerned that the proposal would undermine current State efforts to improve renewals of a consumer's eligibility for Medicaid or CHIP coverage. In particular, these commenters were concerned that the

[218] See Circular No. A–25 Revised. https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf. See also Circular No. A–97. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-097.pdf.*

proposal would limit States' use of available data to determine eligibility before requesting additional income information from the consumer, often referred to as *ex parte* renewals, which have been especially important since the Medicaid continuous enrollment condition ended and Medicaid unwinding began. One commenter noted that *ex parte* renewals allow a State Medicaid or CHIP agency to renew a consumer's coverage without requiring the consumer to submit a renewal form, and thus reduce the risk of loss of coverage due to procedural reasons. The commenter also noted that charging State Medicaid and CHIP agencies for their use of the VCI Hub service would only impede efforts to increase *ex parte* renewals (as has been encouraged by the Administration) because this policy would have significant fiscal impacts for Medicaid and CHIP agencies if additional income data is needed from the VCI Hub service. As a result, the commenter predicted that some State Medicaid and CHIP agencies may choose to stop using the VCI Hub service, which would impact Medicaid and CHIP renewals.

A few commenters also expressed their concern that if State Exchanges or State Medicaid and CHIP agencies pivot to alternative data sources rather than using the CSI income data accessed through the VCI Hub service, less accurate data may lead to inaccurate eligibility determinations for either Exchange QHP or Medicaid and/or CHIP coverage, which could harm consumers by causing them to incur large tax liabilities due to income inaccuracies or increasing churn. Finally, a few commenters noted that the proposal could also lead to consumer harm due to increases in premiums, as States make budget adjustments to pay for their use of the VCI Hub service, whereas other commenters were concerned that charging Hub data fees could have negative impacts, such as reducing State flexibility to operate their own Exchanges as they see fit.

Response: We believe that this policy change, which will take effect on July 1, 2024, should not significantly impact State Medicaid unwinding activities. After the continuous enrollment condition ended on March 31, 2023, States were required to, over time, complete renewals consistent with Federal requirements for all individuals enrolled in their Medicaid program as of that date, disenroll individuals if they were no longer eligible, and determine potential eligibility of those individuals for certain other sources of coverage. States are required under 42 CFR 435.916(a) to redetermine eligibility without requiring information from the individual (that is, *ex parte* renewal), unless necessary. Per 42 CFR 435.948(a), States generally have flexibility to decide what data sources are useful when conducting electronic data matches to verify income as part of the *ex parte* renewal process. Examples of income data sources that could be used in lieu of or in addition to the VCI Hub service to conduct *ex parte* renewals include but are not limited to: State quarterly wage data, State unemployment compensation data, State income tax data, Supplemental Nutrition Assistance Program (SNAP) data, and Temporary Assistance for Needy Families (TANF) data. We encourage States to use a variety of available data sources to maximize utilization of the *ex parte* process and ensure coverage is maintained for eligible individuals. Additionally, to support States facing significant operational and Medicaid eligibility and enrollment system issues and to help minimize procedural disenrollments as they resumed routine operations, we have granted States section 1902(e)(14)(A) waivers to support unwinding efforts.[219] [220] A number of these strategies are focused on facilitating the renewal process by limiting the need for requests for additional information from beneficiaries, thus leading to fewer procedural disenrollments and reducing State administrative burdens during this transition period.

We acknowledge the concern raised by commenters that if a State chooses to reduce its use of the VCI Hub service due to this policy change, this may result in additional requests for additional documentation or other information from individuals to verify income. However, we believe there are ways to mitigate this concern. Other reliable government data sources, whether State or Federal, are available to verify income, some of which must be accessed if useful (for example, quarterly wage data, income information from a SNAP case file if the individual is receiving SNAP benefits) before a State may require additional documentation from the individual.[221] Additionally, States have the flexibility to implement strategic data hierarchies, which would allow States to implement business logic regarding how data sources and other available information are used in making an *ex parte* eligibility determination, including only requesting CSI income data from the VCI Hub service in cases where income could not be verified using these other data sources, such as the examples listed above. Because States have flexibility to adjust how and when they access the VCI Hub service, and because other reliable government sources of income information are available, we do not predict the policy will result in inaccurate eligibility determinations.

We understand the concern raised from States that up-to-date and accurate income data is essential for both State Exchanges and State Medicaid and CHIP agencies to make accurate eligibility determinations for Exchange QHP, Medicaid, or CHIP coverage and that this policy may lead to consumers incurring large tax liabilities when filing their Federal income taxes or increase churn in and out of Medicaid or CHIP coverage. However, there are consumer protections in place to protect consumers from incurring large tax liabilities. For example, all Exchanges are required to give consumers the opportunity to provide more up-to-date and accurate income information through the income DMI process. There are also protections in place to help mitigate Medicaid and CHIP churn. For example, 42 CFR 435.916 and 457.343 generally require that the State Medicaid and CHIP agency provide a 90-day reconsideration period, or a longer period elected by the State, which allows Medicaid or CHIP beneficiaries who are disenrolled for failure to submit the renewal form or necessary information, to provide a renewal form or necessary information to their State Medicaid and CHIP agency to reconsider eligibility for Medicaid and/or CHIP without having to complete a new application. Furthermore, as finalized in the 2024 Payment Notice (88 FR 25831), Exchanges now have the option under § 155.420(c)(6) to provide consumers losing Medicaid or CHIP with 90 days (instead of 60 days) after the loss of such coverage to enroll in a

[219] SHO# 22–001: Promoting Continuity of Coverage and Distributing Eligibility and Enrollment Workload in Medicaid, the Children's Health Insurance Program (CHIP), and Basic Health Program (BHP) Upon Conclusion of the COVID–19 Public Health Emergency: *https://www.medicaid.gov/sites/default/files/2022-03/sho22001.pdf*.

[220] Available State Strategies to Minimize Terminations for Procedural Reasons During the COVID–19 Unwinding Period: Operational Considerations for Implementation, December 2023: *https://www.medicaid.gov/sites/default/files/2023-12/considerations-for-procedural-termination-strategies.pdf*.

[221] We note, as discussed in the 2012 final rule on Eligibility Changes Under the Affordable Care Act of 2010, ''[t]he time lag in the availability of quarterly wage data would not justify a State concluding that such data is not useful to verifying income eligibility and routinely relying instead on documentation provided by the individual'' (77 FR 17175).

QHP through an Exchange through a special enrollment period (SEP), which could also help ease transitions into Exchange QHP coverage.

Finally, we acknowledge that this policy change may cause State Exchanges to raise their user fees to pay for accessing CSI income data through the VCI Hub service and that this may lead to premium increases for consumers. However, we believe that there are ways for States to prevent this potential outcome, such as accessing alternative data sources for income verification or implementing logic changes to their eligibility and enrollment systems to only request CSI income data when income cannot be verified using other data sources such as IRS income data, State quarterly wage data, etc.

Comment: Several commenters expressed concern that the proposed effective date of July 1, 2024, would give States little time to account for the VCI Hub service costs into their FY 2025 budgets, explore the viability of alternative verification methods and/or data sources, or devise strategies to reduce their utilization of the VCI Hub service. A few of these commenters proposed specific delayed dates for implementation, ranging from 1 to 3 years after the proposed effective date of July 1, 2024. One commenter stated that 46 States have fiscal years that run from July 1 to June 30, allowing little time to account for the policy change that requires States to pay for their utilization of the CSI income data accessed through the VCI Hub service in their FY 2025 budgets, as some State legislatures begin this activity as early as January 2024. Another commenter noted that its State Exchange sets its user fee each year in February, and so would not have the opportunity to increase the user fees to pay for the policy until February 2025, and expressed concern that increasing user fees would have a chilling effect on issuer participation.

Response: We are finalizing that beginning July 1, 2024, State Exchanges and State Medicaid and CHIP agencies will be required to reimburse HHS for the costs of their access to and use of the VCI Hub service. Because use of the VCI Hub service is optional for State Exchanges and State Medicaid and CHIP agencies to verify income, we do not believe that it is prudent to delay the implementation of this policy. State Exchanges and State Medicaid and CHIP agencies are responsible for determining eligibility for their respective programs (Exchange QHP coverage or Medicaid/CHIP) and thus responsible for the cost to access the optional CSI income data accessed through the VCI Hub service used to determine eligibility. Furthermore, States can utilize other government data sources (for example, IRS tax data and SSA title II data) that are free and, in most cases, will verify an applicant's income without the need to also access CSI income data accessed through the VCI Hub service.

While we recognize States' concerns about funding this use of the CSI data by July 1, 2024, we have been proactively working with States since before the publication of the proposed rule to prepare States for this possible transition and will continue to do so. We believe that some of these concerns can be mitigated by strategizing ways to reduce their reliance on CSI income data by either using alternative data sources, such as State quarterly wage data to verify income, or only accessing CSI income data if States are unable to verify income using other available data sources. For example, an Exchange may implement logic changes within their eligibility systems to only request CSI data in cases where a consumer's current income could not be verified using IRS income tax or SSA title II income data, which would act as a cost-saving measure for States. To ease the transition by July 1, 2024, we will work with States to help navigate how to pay for their use of the CSI income data, including those States with only one VCI Hub service connection for both their State Exchange and State Medicaid and CHIP agency which may require additional effort to allocate the payment responsibility between the State Exchange and State Medicaid and CHIP agency.

Lastly, we reiterate that Exchanges and State Medicaid and CHIP agencies are not required to use the VCI Hub service to fulfill the mandatory eligibility determination requirements.[222]

Comment: Commenters stated that the proposal will create numerous operational and cost challenges for States and charging States for use of the VCI Hub service poses an unfair cost burden on State Exchanges. One commenter stated that the policy may cause costly system redesign or alternative arrangements, such as States establishing their own income verification service contracts, as well as increased complexity and costs associated with identifying usage of the VCI Hub service that is eligible for FMAP. Furthermore, the commenter stated that the new costs introduced by this proposal could discourage States from transitioning to or maintaining their status as a State Exchange in the future. Accordingly, these commenters suggested that HHS should make grants available to establish alternate income verification sources for States transitioning to a State Exchange, asserting that existing State Exchanges have had time to charge user fees, build reserves upon which to draw, and have benefited from years of the VCI Hub service without any cost to them. Another commenter cautioned that, given increasingly tight State budgets, this policy would represent an unanticipated outlay that might draw funds away from other critical programs.

A few commenters objected to the policy on the grounds that HHS has not given States an estimate of the costs or historical volume of States' use of the VCI Hub service and requested that HHS do so before finalizing the policy. One commenter stated that HHS did not provide enough evidence as to why Hub data use fees are necessary, especially given that States have been successful in enrolling and protecting consumers using standards and processes that work best for the residents of their respective States. Another commenter noted that this policy, if finalized, would result in significant cost to States which could be detrimental to further utilization of the VCI Hub service and stated that States with a larger Medicaid and CHIP population will bear greater cost shift. The commenter stated that it is uncertain if the expense will remain sustainable for those States in future budget years.

Response: It is appropriate to reinterpret State Exchange and State Medicaid and CHIP agency use of the VCI Hub service to access and use the income data provided by the optional VCI Hub service as a State Exchange or a State Medicaid and CHIP agency function. Therefore, it is also appropriate for States to be responsible for the cost of administering the program. Specifically, it is appropriate for States with greater Medicaid population and therefore higher use of the service to bear a greater cost because the costs of the service are driven by the number of returned data matches that the VCI Hub service initiates for consumers. Therefore, costs to States will be calculated by multiplying the actual number of purchased transactions returned from the VCI Hub service by the price per transaction for HHS to provide the VCI Hub service, as well as an administrative fee to reimburse HHS for any direct or indirect costs of making

[222] State Exchanges continue to have flexibility under §§ 155.315(h) and 155.320(c)(3)(iv) to use an alternative verification source, like State wage data, when income is not verified using IRS tax data or SSA title II income data.

CSI income data accessed through VCI Hub service available to Exchanges and State Medicaid and CHIP programs. More detailed cost information will be set forth in an Intergovernmental Cooperation Act Agreement (IGCA) between HHS and the State Exchange or State Medicaid and CHIP agency. We acknowledge that some States may choose to reduce or discontinue their use of the VCI Hub Service in response to the costs that the finalization of this policy represents to States. We will continue to provide the VCI Hub Service to States that choose to continue or begin using the VCI Hub service.

We do not believe that the finalization of this policy will meaningfully discourage States from transitioning to, or maintaining, their status as a State Exchange. We anticipate that existing State Exchanges, as well as States considering transitioning to a State Exchange, will employ strategies to encourage efficient use of the VCI Hub service, as well as leverage other existing sources of income data.[223] We believe that these strategies will help to keep costs below levels that would discourage States from transitioning to, or maintaining, their status as a State Exchange.

Regarding the request that HHS provide grants to States newly transitioning to a State Exchange to obtain other data sources for income verification, currently, HHS is unable to establish such a grant program because it lacks the Congressional appropriation to do so. States transitioning to a State Exchange should set their Exchange user fees appropriately to fund their anticipated utilization of the VCI Hub Service (or establish an alternative income verification source such as State quarterly wage data) as HHS is setting the FFE and SBE–FP user fees to fund the FFE and SBE–FP utilization of the VCI Hub service.

We also note that, to assist States in estimating the costs of continued utilization of the VCI Hub Service, and in anticipation that this proposal could be finalized, we made historical cost and utilization data of the VCI Hub service available to States with State Exchanges and State Medicaid and CHIP agencies that currently utilize the VCI Hub Service. We may share historical use data with other States that are considering using the VCI Hub service. However, we note that this information may be of limited value because of the wide variation in factors, such as individual State policy, whether or not a State Exchange shares an integrated eligibility system with the State Medicaid and CHIP agency, etc., which greatly impacts a State's utilization of the VCI Hub service. As noted earlier in this rule, we intend to work with States to help navigate how to pay for their use of the CSI income data.

Comment: Several commenters stated that, should HHS finalize the proposal to reinterpret use of the VCI Hub service as a function of State Exchanges and Medicaid and CHIP agencies and not an HHS function, they would prefer a monthly invoice (''postpay'') approach because billing for their actual utilization of CSI income data accessed through the VCI Hub service would be simpler, more efficient, and would avoid additional costs associated with prebilling and reconciliation.

A few commenters supported the proposal for HHS to charge State Exchanges and State Medicaid and CHIP agencies in advance for their projected annual use of the VCI Hub service (''to prepay''). One commenter stated that paying in advance for their anticipated annual usage with an annual reconciliation process would be easier administratively and would allow for more certainty in budgeting the State's share of the matching costs each year. Another commenter stated that a prepay approach may align well with a State's budget processes and the regular Advance Planning Document (APD) process used to obtain Federal Financial Participation (FFP). Further, the commenter also stated that a more frequent than annual (for example, monthly) invoicing and estimating usage of the VCI Hub service cadence would increase the administrative burden of maintaining the service and would be unlikely to alter the methodology by which the State develops costs estimates related to their use of the VCI Hub service. Another commenter stated that, if a prepay approach is finalized, it would be efficient to align the payment to HHS with the State's FFP schedule to allow more frequent reconciliation of VCI Hub service usage estimates.

A few commenters suggested that, because different State Medicaid and CHIP agencies have different preferences on how they are invoiced, that HHS should consider providing States with several different invoicing options so that States can choose which invoicing cadence, such as monthly, quarterly, or annually, works best for their State.

Response: In light of comments received, rather than require that States pay in advance for their utilization of the VCI Hub service as proposed, we are finalizing the alternative approach we proposed, whereby HHS will invoice States on a monthly basis for their actual utilization of the CSI income data accessed through VCI Hub service, as well as an administrative fee to account for any direct or indirect costs of making CSI income data accessed through VCI Hub service available to State Exchanges and State Medicaid and CHIP agencies.[224] We agree with commenters that a postpay approach will reduce administrative burden on States, increase efficiency, and reflect a State Exchange's or State Medicaid and CHIP agency's actual utilization of the VCI Hub service from the month prior, rather than a yearly estimate that could vary widely due to unforeseen events. Even though monthly invoicing increases the frequency of invoices compared to annual invoicing, it will also allow State Exchanges and State Medicaid and CHIP agencies to quickly realize cost savings from efficient utilization of the VCI Hub service and allow State Exchanges and State Medicaid and CHIP agencies to become aware of inefficient utilization trends, which an annual invoice will not easily capture. We also agree with commenters that this alternative approach will avoid additional costs associated with prebilling and reconciliation.

Furthermore, this alternative or ''postpay'' approach will negate the need for States to establish, and for HHS to approve, an estimation methodology for their projected annual utilization of the VCI Hub service, which we believe would be challenging for States to estimate. While States could rely on historical utilization of the VCI Hub service to project future utilization, as Exchange populations continue to grow, past data could become less reliable and could result in inaccurate estimates, which could lead to an overly expensive and burdensome reconciliation process. Each of the States will execute an IGCA with CMS that must be in effect before the VCI Hub service can be utilized by the States. Under the terms of the IGCA, CMS will invoice the State for the actual costs of the State's use of CSI data provided via the VCI Hub service for the previous month.

We also acknowledge the preference of a few commenters for a prepay approach for administrative ease and more certainty in budgeting the State share of the matching costs each year. However, we believe that a postpay

[223] State Exchanges continue to have flexibility under §§ 155.315(h) and 155.320(c)(3)(iv) to use an alternative verification source, like State wage data, when income is not verified using IRS tax data or SSA title II data.

[224] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.* See also Circular No. A–97. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-097.pdf.*

approach will be administratively simpler for both participating States and HHS compared to a prepay approach. Additionally, we note that, the finalization of a postpay approach notwithstanding, States will still need to budget for the State's share of matching costs based on their utilization estimates of the VCI Hub service.

At this time, we are unable to facilitate a mixed approach, wherein participating States choose between a prepay and postpay approach. A mixed approach would require administering parallel sets of policies, timelines, and system builds. The operational complexity and inefficiency of such an approach would increase the cost of administering the VCI Hub Service.

Comment: One commenter asked HHS to clarify that SBE–FP States would not be charged for VCI Hub service Exchange-related expenses as this should already be accounted for in the SBE–FP user fees that HHS already receives. One commenter proposed a discount on the FFE or SBE–FP user fee for States that opt to use their own verification services instead of the VCI Hub service, stating that such an approach would encourage States to invest in alternative verification technologies, potentially leading to more tailored and State-specific solutions. One commenter opposed any attempt by HHS to apportion VCI Hub service fees for Exchange verification activities that result in determination of Medicaid, CHIP, or BHP, if applicable, eligibility, stating that these activities should be charged to the program for which the individual is determined eligible.

Response: HHS will not invoice SBE–FPs for the cost of access to and use of the VCI Hub service when initiated by HHS to the VCI Hub service for income verification on behalf of SBE–FPs. Instead, a portion of the Exchange user fees that HHS already collects from issuers in FFEs and SBE–FPs will fund HHS' access to and use of the VCI Hub service on behalf of the FFE and SBE–FPs. HHS will charge Medicaid and CHIP agencies in States with SBE–FPs for their access to and use of the VCI Hub service.

We will not reduce the FFE or SBE–FP user fee in an FFE or SBE–FP State where the State, State Medicaid and/or CHIP agency opts to use their own data source or service for verifying income, instead of the VCI Hub Service. Because the FFE and SBE–FP user fee rates are set as a percent of premium for all issuers in an FFE or SBE–FP and account for the cost of all special benefits provided to the FFE and SBE–FP, we do not make specific State adjustments.

For apportionment of costs between various State programs, we clarify that in States with a single Hub connection, the allocation between the State Exchange and State Medicaid and CHIP agencies will be determined by the States and reported to HHS through the Advance Planning Document processes. Conversely, in States with multiple Hub connections, each purchased transaction that returned matched data from the VCI Hub service will be attributed to the Hub connection through which the purchased transaction was initiated. As previously noted, to help States assess the potential implications of this proposed policy change, we shared data with States on their historical usage of the VCI Hub service, broken out by Hub connection in States with more than one connection.

Comment: A commenter stated that Congress should appropriately fund HHS and the Hub to ensure that Medicaid and CHIP agencies can access important sources of income data. Furthermore, that commenter sought clarification from HHS on FFP support for States that sought a direct contracting option with a commercial vendor. Another commenter supported that Medicaid and CHIP agencies would be eligible for Federal matching funds for the cost of the service.

Response: We note that the finalization of this policy will fund State Exchanges' and State Medicaid and CHIP agencies' use of the VCI Hub service through monthly charges to those agencies, and fund FFE and SBE–FP use of the VCI Hub service through FFE and SBE–FP user fees and not by a new Congressional appropriation. We also note that States that choose to pursue a direct contracting option with a commercial vendor may be eligible for enhanced FFP from HHS for Medicaid utilization of these types of services, but not for State Exchange utilization of those services. We further note that States that choose to pursue a direct contracting option with a commercial vendor for their State Medicaid usage may be eligible for 75 percent matching for the operation of mechanized claims processing and information retrieval systems [225] and 90 percent matching for any design, development, and installation (including for modifications) of eligibility and enrollment systems and/or other related Medicaid Enterprise System (MES) components used for Medicaid eligibility and determination purposes.[226] For CHIP utilization of commercial vendor services, States may be eligible for Federal matching funds under the State's CHIP allotment. States should work with their MES State Officers through the APD process and ensure that any Federal cost allocation requirements (applicable where an expenditure supports multiple benefiting programs) for the acquisition and/or contract for these services are met.

Comment: Another commenter opposed HHS' reinterpretation of the use of the VCI Hub service to verify APTC eligibility as a State Exchange function and not a Federal function, stating that section 1411 of the ACA makes HHS responsible for verification. The commenter asserted that section 1411(d) of the ACA allows HHS to delegate responsibility for verification to Exchanges, but not for verification of information outlined in section 1411(c) of the ACA (which includes income), and therefore HHS cannot delegate this verification to Exchanges.

Response: We acknowledge that section 1411 of the ACA requires HHS to be responsible for income verification and clarify that the policy at issue here does not delegate income verification to the States. Section 1411(c)(3) of the ACA requires that the Secretary submit the information described in subsection (b)(3)(A) provided under paragraph (3), (4), or (5) of subsection (b) to the Secretary of the Treasury for verification of household income and family size for purposes of eligibility. However, in some situations, if government sources of income (like IRS tax data) indicate that the applicant(s)' attested income is significantly different from what IRS returns for the year for which coverage is requested, the applicant or enrollee is considered to have experienced a chance in circumstances, which allows HHS to establish procedures for determining eligibility for APTC and CSRs on information other than IRS tax return data as described in § 155.320(c)(3)(iii)–(vi).[227] In these situations, and where government sources of income are unavailable, data on current income may be used for eligibility determinations and redeterminations for financial assistance and is accessed through the VCI Hub service. In other words, the purpose of the optional VCI Hub service is to verify income in those instances where the Department of Treasury is unable to do so and would only be used once the Department of Treasury fails to verify income. Therefore, HHS is interpreting

[225] See 42 CFR 433.116.

[226] See 42 CFR 433.112.

[227] *See* section 1412(b)(2) of the ACA.

the statute such that the obligation of the Secretary of HHS to verify income is fulfilled once the information has been verified against data provided by the Secretary of the Department of Treasury, and any additional efforts to verify income (such as through the VCI Hub Service) should be construed as being subject to section 1413 of the ACA, which gives the Secretary of HHS broad discretion in administering the program.

Comment: A few commenters responded to our request for information regarding the extent to which States may be interested in potential avenues to reduce operational burdens or address budget challenges facing State Exchanges and Medicaid and CHIP agencies, including whether the reuse of verification data, coupled with cost allocation across programs, would reduce operational burdens or address budget challenges, and whether States have separate, direct access to the same or similar source of VCI Hub services. One commenter stated that it is currently using the CSI data source for all Medicaid and CHIP applications but, in the future, will pursue streamlining by using the VCI Hub service only for a subset of applications that require additional post-eligibility verification. Another commenter was interested in the potential efficiencies gained from re-using Hub information across multiple State-managed programs but stated that more time would be needed to further evaluate such an option.

Response: We appreciate commenters' interest in the re-use of CSI data delivered through the VCI Hub service. We will continue to evaluate this option and confer with States regarding efficiencies that could result from the re-use of CSI data.

13. Eligibility Redetermination During a Benefit Year (§ 155.330(d))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82578), we proposed updates and changes to 155.330. At § 155.330, we proposed to redesignate paragraph (d)(3) as paragraph (d)(3)(i) and add paragraph (d)(3)(ii) to require Exchanges to conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage beginning with the 2025 calendar year. Additionally, we proposed to add § 155.330(d)(3)(iii) to grant the Secretary the authority to temporarily suspend the periodic data-matching (PDM) requirement during certain situations or circumstances that lead to the unavailability of data needed to conduct PDM.

Under § 155.330(d), Exchanges are required to periodically examine available data sources, referred to as PDM, to identify whether enrollees become deceased, and to identify whether enrollees on whose behalf APTC or CSRs are being paid have been found eligible for or are enrolled in Medicare, Medicaid, CHIP, or the BHP, if a BHP is operating in the service area of the Exchange. Additionally, upon such identification, § 155.330(e)(2)(i) requires Exchanges to notify the enrollee of the updated information and provide the notified enrollees 30 days from the date of the notice to appeal PDM findings.

Currently, § 155.330(d)(3) defines ''periodically'' only for PDM activities that identify enrollment in Medicare, Medicaid, CHIP, and, if applicable, BHP, meaning that Exchanges must conduct Medicare PDM, Medicaid or CHIP PDM, and, if applicable, BHP PDM, twice a year. The current regulation does not specify the frequency by which PDM activities to identify deceased enrollees must occur, but the 2019 Program Integrity Rule requires that Death PDM be conducted once annually, and we noted that we intended to update the frequency for Death PDM in future rulemaking. As explained in the 2019 Program Integrity Rule, we did not require Exchanges to perform PDM for death at least twice in a calendar year so that Exchanges could prioritize the implementation of the new requirement to conduct PDM for Medicare, Medicaid, CHIP and, if applicable, BHP eligibility or enrollment at least twice yearly. In the proposed rule, we proposed to add § 155.330(d)(3)(ii) to require Exchanges beginning with the 2025 calendar year to conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage after following the procedure specified in § 155.330(e)(2)(i).

Periodic checks for deceased enrollees help ensure Exchange program integrity. This policy would not only align with current FFE policy and operations but would also prevent overpayment of QHP premiums and APTC/CSRs, and accurately capture household QHP eligibility based on household size. Additionally, by conducting Death PDMs twice a year, Exchanges can prevent future auto re-enrollments or policy effectuation for deceased enrollees for the next plan year.

Additionally, we proposed to add § 155.330(d)(3)(iii) to grant the Secretary the authority to temporarily suspend the PDM requirement during certain situations or circumstances that lead to an unavailability of data needed to conduct PDM. PDMs are conducted as a program integrity measure where the prerequisite for conducting a proper PDM is assurance of data quality. We recognize that during certain circumstances data quality may be incomplete or lagging. For example, during the COVID–19 Public Health Emergency, State and local agencies had to strain their resources to address backlogs due to job losses and other administrative gaps further slowing down response times,[228] thereby, increasing the risk of the Exchanges making inaccurate eligibility determinations due to potential data lags. In such cases, using such data could pose a risk of improper termination of coverage or APTC/CSRs for large numbers of enrollees. These improper terminations may be particularly harmful to the consumers. These potential harms can be even more likely to occur when the additional burdens of DMI resolution are imposed on Medicare and Medicaid beneficiaries, who can be vulnerable and underserved and more likely to encounter gaps in coverage or a complete lack of coverage as a result of failing to resolve the DMIs.[229] Allowing the Secretary the flexibility to temporarily suspend the PDM requirement during certain situations where there may be enrollment or data lags may be able to prevent an inadvertent increase in the uninsured population, which largely consists of vulnerable consumers. We will notify Exchanges of such a suspension of PDM activities, and a resumption of PDM activities, through subregulatory guidance.

We anticipate most State Exchanges would be able to meet the proposed requirements for Death PDM based on operations already reported through the State-based Marketplace Annual Reporting Tool (SMART) as well as discussions we have had with the State Exchanges on PDM. We also anticipate that changes, including a suspension of the PDM requirement, would be well received by the Exchanges and issuers, as it is important that consumer information, such as eligibility for APTC or QHP coverage, be accurate to avoid expending administrative resources on complex processes to correct errors. Eleven State Exchanges reported in their

[228] McDerrmott, D., Cox, C., Rudowitz, R, and Garfield, R. (2020, Dec. 9). *How Has the Pandemic Affected Health Coverage in the U.S.?* KFF. *https://www.kff.org/policy-watch/how-has-the-pandemic-affected-health-coverage-in-the-u-s/.*

[229] Hirsch, M. (1994). Health Care of Vulnerable Populations Covered by Medicare and Medicaid. Health Care Finance Rev.,15(4):1–5. *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4193433/.*

2022 SMART submissions that they curtailed PDM checks only due to the exigency resulting from the COVID–19 Public Health Emergency, which expired in May of 2023. Furthermore, we do not anticipate the new periodicity requirement for the Death PDM to result in a significant administrative burden for State Exchanges because States previously conducted PDM checks for deceased enrollees.

Under section 1313(a)(4) of the ACA, if HHS determines that an Exchange has engaged in serious misconduct with respect to compliance with Exchange requirements, it has the option to rescind up to 1 percent of payments due to a State under any program administered by HHS until such misconduct is resolved. These existing authorities apply to the PDM requirements in § 155.330(d). If HHS were to determine that it is necessary to apply this authority due to non-compliance by an Exchange with § 155.330(d), HHS would also determine the HHS-administered program from which it would rescind payments that are due to that State. However, if State Exchanges do not comply with the PDM requirements, we generally first direct a State Exchange to take corrective action. We utilize specific oversight tools (for example, the SMART, independent external programmatic & financial audits) to ensure compliance and that State Exchanges take appropriate corrective action. HHS also provides technical assistance and ongoing monitoring to track those actions until the State Exchange remediates the issue fully. We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with modifications. The final rule will require Exchanges to start conducting Death PDMs two times a year beginning calendar year 2025 and will allow the Secretary to temporarily pause PDM during certain situations or circumstances that lead to the limited availability of data (instead of the unavailability of data, as proposed) needed to conduct PDM. We are also adding that the Secretary may temporarily pause PDM during certain situations or circumstances that lead to the limited availability of documentation needed for an enrollee to notify the Exchange that the result of PDM is inaccurate, as described in paragraph (e)(2)(i)(C). We summarize and respond to public comments received on the proposed policy below.

Comment: Many commenters supported the proposal to allow the Secretary of HHS to temporarily pause PDMs in the event data is unavailable to conduct PDM, which may harm consumer enrollment, and for the Exchanges to start conducting Death PDMs twice a year starting PY 2025, in compliance with the ACA requirement.

Response: We thank the commenters for their support of the proposed rule to allow the Secretary of HHS to temporarily pause PDMs in certain situations that lead to the unavailability of data needed to conduct PDM to limit inadvertent harm to the consumers, and for the Exchanges to conduct Death PDMs two times a year and end coverage for identified deceased enrollees, thus stopping premium payments and ending coverage after proper notification. In the proposed rule, we proposed the ''unavailability'' of data is when the Secretary would exercise the authority to temporarily pause PDMs. In this final rule, we are changing ''unavailability'' to ''limited'' availability. From an operational and consumer experience standpoint, if complete data is not readily available for either the Exchanges or consumers, running a PDM may cause inadvertent harm. As a PDM results in termination of coverage or complete cessation of financial assistance, Exchanges may be rendering consumers uninsured and consumers may also not have sufficient documentation to appeal their dual enrollment or deceased status due to limited data available from the respective entities.

Comment: One commenter asked for a clarification that the requirement to conduct PDMs is an Exchange requirement and not an issuer or DE requirement. The commenter proposed that CMS create unique transaction codes to communicate identified deceased enrollee amongst entities.

Response: This policy is for Exchanges to maintain program integrity of its operations by identifying and removing deceased enrollees twice a year. We ask issuers in Exchanges on the Federal platform to direct callers who wish to report a deceased enrollee to the Marketplace Call Center at 1–800–318–2596 (TTY: 1–855–889–4325). We thank the commenter for the recommendation to implement unique transaction codes so Exchanges and issuers can communicate identified deceased enrollees. If an enrollee has been verified as deceased through the Death PDM process, Exchanges on the Federal platform send the issuer an Outbound 834 with a Maintenance Reason Code of ''Term-PDM'' or ''Cancel-PDM'' which notifies the issuer of upcoming termination or cancellation of the deceased enrollee's Exchange coverage, unless otherwise resolved within 30 days of initial notification to the consumer.

Comment: A few commenters supported the proposal and asked CMS to provide clarity and specific examples and scenarios as to when the Secretary of HHS can pause PDM operations, as poor enrollment data can occur outside a public health emergency.

Response: This policy will allow the Secretary to pause PDM operations under certain circumstances that lead to the limited availability of data needed to conduct PDM. Outside of a public health emergency, such circumstances may include enrollment or data lags. We are also finalizing that the Secretary may temporarily pause PDM during certain situations or circumstances that lead to the limited availability of documentation needed for an enrollee to notify the Exchange that the result of PDM is inaccurate, as described in paragraph (e)(2)(i)(C), If a consumer cannot provide sufficient documentation to appeal the PDM findings, they are likely to remain uninsured as the PDM process will likely cause the termination of their coverage or financial assistance.

Comment: One commenter stated that requiring States to conduct PDM two times a year limits States' flexibility. A few commenters firmly opposed the proposed amendment, claiming that the rationale provided does not justify additional Federal requirements and that Death PDM is unlikely to identify inappropriate enrollments such that the program integrity benefits outweigh the cost.

Response: Based on our experience operating the Federal Platform, running Death PDMs two times per year has proven to identify a substantial number of deceased enrollees. We believe that this two-times-a-year requirement is a vital program integrity measure to reduce the amount of QHP premiums paid by the deceased enrollees and the amount of APTC paid on behalf of the deceased enrollees. As allowed under § 155.315(h), State Exchanges have the ability to propose to HHS alternative approaches for verifying the consumer information required under 45 CFR part 155, subpart D, which includes the periodic verification of death status by Exchanges. Per § 155.315(h), HHS' criteria for evaluating these alternative approaches include reduction of administrative costs and burdens on individuals while maintaining accuracy and minimizing delay, as well as maintaining coordination of eligibility with Medicaid and CHIP.

14. Incorporation of Catastrophic Coverage Into the Auto Re-Enrollment Hierarchy (§ 155.335(j))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82579), we proposed to incorporate catastrophic coverage as defined in section 1302(e) of the ACA into the auto re-enrollment hierarchy at § 155.335(j). We proposed this policy because the regulation did not address auto re-enrollment for catastrophic coverage enrollees, nor did it address a scenario in which a catastrophic coverage enrollee would lose eligibility for catastrophic coverage in the coming plan year either because they exceeded the 30-year age limit or lost eligibility for the exemption that allowed them to enroll in a catastrophic plan in spite of exceeding the age limit.[230] Specifically, we proposed to amend § 155.335(j)(1) and (2) to require Exchanges to re-enroll individuals who are enrolled in catastrophic coverage, and who no longer meet the criteria for enrollment in a catastrophic plan, into a bronze metal level QHP in the same product as the enrollee's current QHP (in the case of paragraph (j)(1)), or in the product offered that is the most similar to (in the case of paragraph (j)(2)) the enrollee's current product, and that has the most similar network compared to the enrollee's current QHP; or if no bronze plan is available through this product, in the QHP with the lowest coverage level offered under this product and that has the most similar network compared to the enrollee's current QHP. We also proposed to amend § 155.335(j)(1)(ii) to (iv) and § 155.335(j)(2)(i) to (iii) to use the term ''coverage level'' instead of ''metal level'' so that the rules in this section are inclusive of catastrophic coverage enrollees. Finally, we proposed to add new § 155.335(j)(5) to establish that an Exchange may not newly auto re-enroll into catastrophic coverage an enrollee who is currently enrolled in coverage of a metal level as defined in section 1302(d) of the ACA. We stated that as part of this proposed policy, we would update the Federally-facilitated Exchange (FFE) Enrollment Manual to incorporate catastrophic coverage into the re-enrollment hierarchy for alternate enrollments, sometimes referred to as cross issuer enrollments.[231]

We solicited comment on these proposals, including whether they reflected the State Exchanges' current practices, whether we should consider proposing changes to the auto re-enrollment hierarchy to prioritize re-enrollment in catastrophic coverage for enrollees who remain eligible for catastrophic coverage in a way that is similar to current prioritization of silver level coverage per § 155.335(j)(1)(ii), and whether there are additional strategies to help ensure continuity of coverage for enrollees in catastrophic QHPs.

After consideration of comments and for the reasons outlined in the proposed rule and in our responses to comments, we are finalizing this policy as proposed, except that we are amending the new language that we proposed at § 155.335(j)(1)(v) and (j)(2)(iv) to incorporate the phrase, ''to the extent permitted by applicable State law.'' This change aligns these new policies with existing re-enrollment hierarchy rules, including § 155.335(j)(2) and (j)(3), which include this phrase to indicate that Exchanges must take into account applicable State law when implementing auto re-enrollment. As discussed in further detail below, this change is also in response to a public comment that said Connecticut State law does not permit auto re-enrolling catastrophic coverage enrollees losing eligibility for catastrophic coverage. We summarize and respond to public comments below.

Comment: Many commenters supported the proposed policy because they agreed that it would help promote continuous coverage for Exchange enrollees with catastrophic coverage who do not actively select a plan for the upcoming plan year, including enrollees who lose eligibility for catastrophic coverage. Several commenters cited State Exchanges, including Washington Healthplanfinder and MNsure, that already automatically re-enroll catastrophic coverage enrollees.

Response: We appreciate the information that some State Exchanges already auto re-enroll catastrophic coverage enrollees. We agree that the policy will help promote continuity of coverage, and as noted in the proposed rule, believe that it will also promote transparency and clarity for all Exchanges' interested parties.

Comment: One commenter stated that CMS should explain why current State Exchange practices are insufficient. Another commenter stated that the proposal did not appear to address an industry issue. Many commenters recommended that CMS provide State Exchanges with flexibility in terms of whether or when to implement the policy, including a number of commenters who otherwise supported the goal of helping enrollees maintain continuous coverage. A few commenters that opposed the proposal cited their general opposition to limits on State flexibility.

One commenter stated that the Idaho State Exchange had already addressed the problems that the proposed rule intended to solve, including this proposal. A few commenters stated that the proposal would not be effective because several State Exchanges do not currently have the ability to auto re-enrollee catastrophic coverage enrollees. Another commenter stated that Connecticut law prohibits auto re-enrolling enrollees losing eligibility for their catastrophic coverage, because a law specifies that only a licensed producer or agent may recommend a specific plan to a consumer.

Several commenters recommended that, rather than requiring State Exchanges to automatically re-enroll catastrophic coverage enrollees, CMS should allow Exchanges to encourage these consumers to actively select a new plan, especially in cases where an enrollee would lose eligibility for catastrophic coverage. One commenter stated that Connect for Health Colorado does not auto re-enroll enrollees losing eligibility for catastrophic coverage, and instead performs outreach encouraging them to choose a plan that works best for them.

Several commenters asked that, if the proposal is finalized, CMS continue allowing Exchanges to determine their own auto re-enrollment hierarchy.

Response: In response to the comment that Connecticut State law does not permit auto re-enrolling catastrophic coverage enrollees losing eligibility for catastrophic coverage, we are amending the proposed language at § 155.335(j)(1)(v) and (2)(iv) to incorporate the phrase, ''to the extent permitted by applicable State law,'' to reflect that Exchanges must take into account applicable State law when implementing auto re-enrollment. This language aligns paragraph (j)(1)(v) with the rest of § 155.335(j); for example, the language at paragraphs (j)(2) and (3) specifies that those policies are subject to applicable State law. CMS' technical assistance materials also account for the fact that Exchange re-enrollment practices may vary based on applicable State law. For example, the Frequently Asked Questions for the 2023 Marketplace Open Enrollment Period Public Use Files explains that certain

[230] *See* § 155.305(h).

[231] The FFE Enrollment Manual includes the hierarchy that we use to implement § 155.335(j)(3) in Exchanges using the Federal platform to crosswalk enrollees whose current issuer no longer offer plans available to them through the Exchange. For example, see CMS. (2023, July 12). *Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 3.2.4, pp 29–30. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

plan crosswalk metrics are not reported for State Exchanges because since not all State Exchanges allow for consumers whose product is discontinued or whose issuer no longer offers any QHPs to be automatically re-enrolled in a new plan.[232]

We are otherwise finalizing the policy as proposed, because we believe that automatically re-enrolling all Exchange enrollees who do not actively select a plan or terminate their coverage is important to help ensure continuity of coverage. We intended this policy to protect against disruptions in care that could be avoided through implementation of a re-enrollment hierarchy for enrollees in catastrophic coverage. We explained in the proposed rule (88 FR 82579) that while Exchanges on the Federal platform generally already auto re-enroll these enrollees, the absence of a re-enrollment hierarchy in regulation for catastrophic coverage enrollees meant that we could not, as operator of Exchanges on the Federal platform, require issuers to provide plan crosswalk information for enrollees losing eligibility for catastrophic coverage. We are of the view that this consumer-protective policy is reasonable and appropriate regardless of whether it addresses an industry issue.

State Exchanges that cannot implement or choose not to implement the re-enrollment hierarchy as described in this rule may seek approval from the Secretary to conduct their own annual eligibility redetermination process, as described in § 155.335(a)(2)(iii). We already consider State Exchanges' requests for flexibility in this area on an annual basis, as part of their submission of their eligibility re-determination and re-enrollment plans, both in order to mitigate burden and to permit innovation that allows Exchanges to best serve their enrollees.

We also appreciate the additional detail from commenters on the extent to which State Exchanges do or do not incorporate enrollees in catastrophic coverage into their auto re-enrollment processes, including that some Exchanges do not currently auto re-enroll catastrophic coverage enrollees, or do not automatically re-enroll those who will lose eligibility for catastrophic coverage. We agree that an ideal enrollment experience is one in which an enrollee actively chooses a plan that best fits their needs for the coming year, and we note that auto re-enrollment does not prevent Exchanges from also performing robust outreach and engagement encouraging all enrollees, including those with catastrophic coverage, to actively select a new plan for the coming year. This policy, like the rest of the auto re-enrollment hierarchy at § 155.335(j), is a safeguard to prevent enrollees from losing coverage if they do not actively select a plan or cancel their coverage by the end of the annual open enrollment period.

Comment: Two commenters said that this proposal would increase health insurance premiums due to increased burden on State Exchanges and QHP issuers.

Response: We disagree that this policy will increase health insurance premiums due to increased burden on QHP issuers or State Exchanges. As discussed in the proposed rule (88 FR 82580), as the operator of Exchanges on the Federal platform, we already include almost all catastrophic coverage enrollees in our annual auto re-enrollment process; therefore, this policy will not increase burden on us or on issuers that participate in Exchanges on the Federal platform. Furthermore, while two commenters raised general concerns associated with increased costs of health insurance, they did not specify how or why an Exchange or issuer would incur costs associated with incorporating catastrophic coverage enrollees into existing auto re-enrollment processes already required by § 155.335(j). Thus, we do not anticipate that finalization of this policy will result in sufficient Exchange or issuer burden to cause premium increases. Nevertheless, we note that in the unlikely event that compliance with this policy would be burdensome for an Exchange to the point that it would result in increased premiums, as discussed earlier, Exchanges may seek approval from the Secretary for flexibility as described in § 155.335(a)(2)(iii).

We also do not anticipate that implementation of this policy would increase QHP issuer burden that would lead to increases in premiums, because issuers participating in Exchanges on the Federal platform have not raised concerns about supporting auto re-enrollment for catastrophic coverage enrollees. As discussed in the proposed rule (88 FR 82580), only one QHP issuer participating in our auto re-enrollment process for Exchanges on the Federal platform did not submit a crosswalk option for enrollees losing catastrophic coverage eligibility, indicating that compliance with this policy would not increase issuers' costs beyond those associated with the existing annual QHP Certification process.

Comment: A few commenters raised the concern that auto re-enrolling catastrophic coverage enrollees into a metal level plan could increase enrollees' monthly premium payments without their knowledge. One commenter added that catastrophic coverage enrollees who are re-enrolled into bronze coverage could experience further increases in premiums in the event the more generous subsidies provided for in the ARP and extended by the IRA expire.[233]

Response: Section 155.335(c)(3) mitigates the risk that enrollees could be enrolled in a metal level plan that increases their premiums without their knowledge by requiring all Exchanges to provide a qualified individual with an annual redetermination notice that includes projected eligibility for the following year, including, if applicable, the amount of any APTC and the level of any CSRs or eligibility for Medicaid, CHIP or BHP. We send enrollees covered through an Exchange on the Federal platform their first reminder to update their application and select coverage for the upcoming plan year by November 1, the start of Open Enrollment. Also, re-enrollment notices that we send to enrollees in all Exchanges on the Federal platform are already designed to advise enrollees of the possibility of increased cost when applicable, because monthly premiums regularly increase from year to year, even for the same plan.[234]

Finally, we acknowledge that catastrophic coverage enrollees who are re-enrolled into bronze coverage could experience increases in premiums, including in the event the more generous subsidies provided for in the ARP and the IRA expire, and that the expiration of the more generous subsidies may cause the amount of premium that must be paid directly by the catastrophic coverage enrollee to increase. This, however, would be true

[232] *See* 2023 Public Use Files FAQs (PDF) (*https://www.cms.gov/files/document/2023-public-use-files-faqs.pdf*), and 2023 Marketplace Open Enrollment Period Public Use Files (*https://www.cms.gov/data-research/statistics-trends-and-reports/marketplace-products/2023-marketplace-open-enrollment-period-public-use-files*).

[233] Section 9661 of the ARP amended section 36B(b)(3)(A) of the Internal Revenue Code for tax years 2021 and 2022 to decrease the applicable percentages used to calculate the amount of household income a taxpayer is required to contribute to their second lowest cost silver plan, which generally result in increased PTC for PTC-eligible taxpayers. For those with household incomes no greater than 150 percent of the FPL, the new applicable percentage is zero, resulting in availability of one or more silver-level plans with a net premium of $0, if the lowest or second-lowest cost silver plan covers only EHBs. The Inflation Reduction Act of 2022 extended these changes through tax year 2025.

[234] For a more detailed discussion of CMS annual auto re-enrollment noticing practices *see* the HHS Notice of Benefit and Payment Parameters for 2024 Final Rule (88 FR 25824).

for enrollees at all metal levels, and the risk of increased out-of-pocket premium costs for enrollees does not outweigh the benefits of this policy, which is intended to ensure continuity of coverage for as many people as possible, including catastrophic coverage enrollees who do not return to the Exchange to actively re-enroll in coverage.

Comment: A few commenters supported the goal of maintaining continuous coverage but raised concerns that auto re-enrollment hierarchies may not take into account certain important factors. One commenter stated that the current auto re-enrollment hierarchy might not adequately account for children's unique health care needs because of its focus on providing continuity regarding cost-sharing requirements. This commenter recommended stronger universal standards for benefits and provider networks, and additional mechanisms to ensure alignment between enrollees' current and future plans. Another commenter stated that a metal level QHP might not be affordable for enrollees who previously had catastrophic coverage and suggested that CMS consider a limit on premium or out-of-pocket cost increases for automatic enrollment or require plans to provide appropriate notification before auto re-enrolling. One commenter asked CMS to consider the importance of non-EHB benefits in the auto re-enrollment hierarchy, such as dental, vision, or allergy testing benefits.

Response: We did not propose changes to the re-enrollment hierarchy other than incorporating catastrophic coverage into § 155.335(j); therefore, any comments on other elements of the re-enrollment hierarchy are outside the scope of this rulemaking. We also note that this policy does not impact potential issues of benefit or network continuity. We acknowledge comments on potential drawbacks to the current re-enrollment hierarchy and recommendations to improve continuity of coverage based on prioritization of factors that enrollees may value. In particular, we will consider potential future parameters based on total out-of-pocket cost, though we note that this consideration may in some cases conflict with prioritizing plan benefit, network type, or product continuity.

Comment: Several commenters stated that CMS should also allow Exchanges to automatically re-enroll enrollees losing catastrophic coverage eligibility into a higher metal level QHP when possible, without increasing the enrollee's monthly premiums or changing their provider network. Some of these commenters added that this would be especially helpful for enrollees in catastrophic coverage who would qualify for CSRs if automatically re-enrolled in a silver plan. One commenter stated that Washington Healthplanfinder already implements this policy and has auto re-enrolled more than 50 people aging out of catastrophic coverage into a silver QHP with the same or lower premium and same carrier and network. The commenter noted that this was possible due to a State-based subsidy of up to $250 per month for those with incomes under 250 percent FPL who enroll in a silver or gold level standard plan.

Response: We appreciate comments on potential benefits of amending the re-enrollment hierarchy to allow Exchanges to auto re-enroll catastrophic coverage enrollees into a silver level QHP based on financial assistance eligibility. We are not finalizing this policy as we need more time to explore the benefits and detriments of such a policy. We will consider these comments for future rulemaking. Additionally, as discussed earlier, an Exchange may request to apply a modified hierarchy to its auto re-enrollment process if approved by the Secretary pursuant to § 155.335(a)(2)(iii), including to auto re-enroll catastrophic enrollees into a higher metal level.

Comment: One commenter stated that an SEP for former catastrophic coverage enrollees who are auto re-enrolled to a bronze plan could help consumers avoid a tax liability if they are auto re-enrolled in a plan with a higher premium.

Response: We did not propose and will not finalize any changes to SEPs related to incorporating catastrophic coverage into the re-enrollment hierarchy at § 155.335(j). We appreciate and will take the comment under consideration.

Comment: A few commenters recommended that CMS delay the implementation deadline for the policy. One commenter stated that a delayed deadline would be helpful because of the 9–12-month lead time needed to implement most changes to State Exchanges' IT systems. A few commenters stated that flexibility would be helpful given that CMS was also proposing a number of other requirements with which Exchanges would be required to comply. Another commenter stated that Exchanges might need additional time to implement this and other proposed policies given increases in enrollment of new or returning consumers whose Medicaid coverage is ending due to the expiration of the Medicaid continuous enrollment condition in section 6008(b)(3) of the Families First Coronavirus Response Act (Pub. L. 116–127).

Response: We are finalizing this policy with the implementation deadline proposed because we believe that automatically re-enrolling all Exchange enrollees who do not actively select a plan or terminate their coverage is important to help ensure continuity of coverage. As discussed previously, State Exchanges that cannot implement or choose not to implement the re-enrollment hierarchy as described in this rule make seek approval from the Secretary to conduct their own annual eligibility redetermination process, as described in § 155.335(a)(2)(iii), including to defer implementation of this policy to a plan year after 2025.

Comment: A few commenters supported prioritizing auto re-enrollment in catastrophic coverage the same way that the current hierarchy prioritizes auto re-enrollment in a silver plan—that is, if a silver level plan is no longer available in the same product, the Exchange must crosswalk to a silver plan in another product that is most similar.

Response: We appreciate these comments in response to our solicitation for comments. We did not propose and therefore are not incorporating this policy into the final rule but may consider proposing this policy in future rulemaking.

15. Premium Payment Deadline Extensions (§ 155.400(e)(2))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82581), we proposed to amend § 155.400(e)(2) to codify that the flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors, or issuers directed to do so by applicable State or Federal authorities, is not limited to extensions of the binder payment.

Section 155.400(e) specifies that Exchanges may require, and the FFEs and SBE–FPs will require, enrollees to make a binder payment to effectuate enrollment, and paragraph (e)(1) specifies the range of dates within which an issuer may establish a deadline to pay binder, depending on whether coverage is being effectuated under regular, prospective, or retroactive effective dates. In the 2018 Payment Notice (81 FR 94058), we added paragraph (e)(2) to address situations in which an issuer is unable to timely process binder payments submitted by enrollees, which may impact an enrollee's ability to effectuate

coverage. Specifically, we noted that based on our experience during several open enrollment periods, issuers occasionally experience technical errors, or a processing backlog caused by an unusually high volume of enrollments. As a result, enrollees may be temporarily unable to submit premium payments, or the issuer may be unable to process payments in a timely manner. We thus established an option for issuers to implement a reasonable extension of binder payment deadlines,[235] which ensures that enrollees do not have coverage cancelled due to non-payment when the enrollee did not have adequate time to pay the binder payment.

Although we only addressed extensions to the binder payment deadlines in § 155.400(e)(1), we did not intend to exclude other premium payment scenarios in which Exchanges could, and the Exchanges on the Federal platform would, provide similar flexibility. In published guidance, such as the 2023 *Federally-facilitated Exchange (FFE)* Enrollment Manual,[236] we stated that we will exercise enforcement discretion with regard to regulatory requirements, such as the binder payment and the deadline for payment of premiums under grace periods if an issuer is complying with a State regulatory authority's request to extend premium payment deadlines and delay termination of coverage due to a natural disaster or other emergency within the State.

For example, in connection with the COVID–19 Public Health Emergency declared by the Secretary, HHS exercised enforcement discretion [237] regarding issuers extending premium payment deadlines and delaying cancellations or terminations of coverage with the permission of the applicable State regulatory authority. We proposed to codify that Exchanges may, and Exchanges on the Federal platform would, provide flexibility in such circumstances, including circumstances in which an issuer is directed to do so by applicable State or Federal authorities.

Because current paragraph (e)(2) may be read to limit the flexibility Exchanges could provide issuers regarding payments other than the binder payment, we also proposed to add the phrase ''and other premium payment deadlines.'' Doing so clarifies for interested parties, particularly issuers, that Exchanges may, and Exchanges on the Federal platform will, provide flexibility regarding premium payment requirements other than the binder payment, such as the requirement to trigger a grace period to enrollees receiving APTC under § 156.270(d) if enrollees fail to pay premiums timely.

We requested comments on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to amend § 155.400(e)(2) to codify that the flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors is not limited to extensions of the binder payment. We summarize and respond to public comments received on the proposed policy below.

Comment: Most commenters who weighed in on the proposal supported it, and stated that it would benefit States, consumers, and issuers. One commenter stated that the proposal would make it easier for State Exchanges to explore options to improve the consumer experience. Another commenter stated that the proposal would allow consumers to maintain continuous coverage when technical issues arise that are beyond the consumer's control. Finally, another commenter stated that the proposal would help issuers experiencing billing or enrollment problems due to high volume or technical errors.

Response: We agree that codifying that the flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors is not limited to extensions of the binder payment will help support States, consumers, and issuers by allowing consumers to maintain continuous coverage when they are unable to satisfy premium payment deadlines for certain reasons outside of their control.

Comment: A few commenters supported the proposal but with limitations. One commenter supported the proposal but only in meaningfully extenuating circumstances. Another commenter stated that they support the proposal but are concerned about consumers falling too far behind in payments and requested that the length of the extension be kept to a minimum.

Response: We agree that it is important for this flexibility to be limited to specific circumstances where an issuer requires a reasonable extension of a binder or premium payment deadline, such as a State declaration of natural disaster, and we note that such flexibility is always time limited in scope. We expect that payment extensions would extend until the high volume or technical errors have been corrected or until a reasonable period of time thereafter. We also generally do not anticipate extensions due to high volume or technical errors to be greater than 45 calendar days based on previous experience with binder payment extensions, though extensions related to a State declaration of a natural disaster or public health emergency may be longer.

Comment: One commenter supported the proposal but opposed implementing the policy in a manner that creates retroactive terminations or otherwise places consumers at risk for non-coverage and providers at risk for non-payment during any payment deadline extension. The commenter recommended that CMS clarify that any premium payment deadline extension must be exhausted before any 3-month grace period begins and cannot operate to extend the grace period. In other words, the commenter recommended that an APTC-eligible consumer has not ''fail[ed] to timely pay premiums'' under § 156.270(d) unless and until any premium payment deadline extension has been exhausted, meaning that coverage could be maintained during the extension period and the 3-month grace period (if applicable). One commenter supported the proposal but proposed additional flexibility for plans to hold payments for prescriptions in a pending status during any extension period.

Response: We clarify that this proposal would not allow retroactive termination beyond that already allowed under § 156.270(d). We also clarify that we would not consider the 3-month grace period to have begun until a consumer has failed to pay any required premium by the end of any premium payment deadline extension, consistent with this commenter's recommendation. Although we may allow an issuer, in connection with a billing or enrollment problem due to high volume or technical errors, or at the direction of State or Federal authorities (such as the declaration of natural disaster or other emergency), to delay placing an enrollee in delinquency, once the grace period has begun, issuers must allow enrollees no more than 3 months to pay outstanding premium. If the enrollee does not pay all past due premium by the end of the third month coverage, subject to any

[235] We also stated that we do not anticipate extensions to be greater than 45 calendar days.

[236] CMS. (2023, July 12). *2023 Federally-facilitated Exchange (FFE) Enrollment Manual.* CMS. Section 6.1.3, p. 89, and Section 6.10, p. 110. *https://www.cms.gov/files/document/ffe-enrollment-manual-2023-5cr-071323.pdf.*

[237] Pate, R. (2020, March 24). *Payment and Grace Period Flexibilities Associated with the COVID–19 National Emergency.* CMS. *https://www.cms.gov/files/document/faqs-payment-and-grace-period-covid-19.pdf.*

applicable threshold policy consistent with § 155.400(g), the issuer must terminate the enrollee's coverage retroactively to the end of the first month. We also require, in accordance with § 156.270(d)(1), that during the grace period, the QHP issuer must pay all appropriate claims for services rendered to the enrollee during the first month of the grace period, including for prescription drugs, and may pend claims for services rendered to the enrollee in the second and third months of the grace period, including prescription drugs. We do not see a reason to treat prescription drugs differently from other claims during the grace period. For example, in connection with the COVID–19 Public Health Emergency declared by the Secretary, issuers complying with a State's Department of Insurance order or recommendation to not terminate individual market health insurance coverage through a specified date were informed that once a grace period was triggered, the requirements applicable to the grace period would remain unchanged and would follow the rules outlined in § 156.270(d).

Comment: A few commenters stated that the proposal would be especially helpful to low-income enrollees who may be impacted by factors such as unstable housing or lack of reliable broadband access.

Response: While we agree that the flexibility codified by this proposal may aid consumers, many of whom may be low-income and impacted by factors such as housing or lack of reliable broadband access, these conditions would not trigger the flexibilities allowed by this policy. However, consumers who experience certain hardships may benefit from this policy when State or Federal authorities direct issuers to provide an extension on payments, such as due to a natural disaster or other emergencies in which extenuating circumstances would prevent an issuer from being able to receive payment.

16. Initial and Annual Open Enrollment Periods (§ 155.410)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82581), we proposed changes and updates to § 155.410. At § 155.410, we proposed to amend paragraph (e)(4)(ii) to revise parameters around the adoption of an alternative open enrollment period by a State Exchange. We proposed to require that for benefit years beginning on or after January 1, 2025, State Exchanges must adopt an open enrollment period that begins on November 1 of the calendar year preceding the benefit year and ends no earlier than January 15 of the applicable benefit year, with the option to extend the open enrollment period beyond January 15 of the applicable benefit year.

In part 3 of the 2022 Payment Notice (86 FR 53429 through 53432), where we extended the open enrollment period for the Exchanges on the Federal platform to January 15, we noted several observations regarding a 6-week open enrollment period ending on December 15 including that certain consumers may be subjected to unexpected plan cost increases that they may not be notified about until January, after open enrollment concludes. We also observed that extending the open enrollment period for the Exchanges on the Federal platform to January 15 would ensure ample time for Navigators, assisters, certified application counselors, agents, and brokers to fully assist all interested consumers. We further noted that ending open enrollment on January 15 would give consumers additional time to react to updated plan cost information and more time to seek enrollment assistance, which could improve access to health care coverage, particularly for those in underserved communities who face additional barriers to accessing health care coverage.

In the proposed rule (88 FR 82851), we expressed that these observations hold true as to State Exchanges and warrant requiring that their open enrollment periods also end no earlier than January 15. Since we extended the open enrollment period for Exchanges on the Federal platform in part 3 of the 2022 Payment Notice final rule, four States have transitioned to the State Exchange model, and we anticipate that there will be additional State Exchanges in future benefit years, which increases the potential for differing open enrollment periods. While most of the State Exchanges already hold an open enrollment period that ends on or after January 15 of the benefit year, we expressed our belief that the risk of shorter open enrollment periods in the future requires ensuring a minimum open enrollment period across all Exchanges, including State Exchanges. We predicted that this policy would impose a minimal burden on most of the State Exchanges.

Additionally, we stated that ensuring State Exchanges' open enrollment periods begin on November 1 of the calendar year and continue through at least January 15 of the benefit year—thereby ensuring substantial overlap among all Exchange open enrollment periods—would reduce consumer confusion in States with State Exchanges that currently hold open enrollment periods that are shorter than the open enrollment period for the Exchanges on the Federal platform, or that begin before November 1 and end earlier than January 15. Consumers in these States would have more time to enroll in coverage and would be less likely to miss opportunities to enroll due to confusion about the duration of the open enrollment period. The combined benefits of this policy in terms of reducing consumer confusion and building in additional time for consumers to enroll could further increase Exchange enrollment and potentially have downstream impacts like improving the uninsured rate in States.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the provision that for benefit years beginning on or after January 1, 2025, State Exchanges must adopt an open enrollment period that begins on November 1 of the calendar year preceding the benefit year and ends January 15 of the applicable benefit year or later. However, we are finalizing the rule with an addition: we are adding paragraph (e)(4)(iii) to grandfather the open enrollment period of any State Exchange that held an open enrollment period that began before November 1, 2023, and ended before January 15, 2024, for the 2024 benefit year so that it can continue to begin open enrollment before November 1 in consecutive future benefit years, so long as that State Exchange's open enrollment period continues uninterrupted for at least 11 weeks. If the State Exchange changes the dates of its open enrollment period after the effective date of this rule, it must for that and subsequent benefit years hold an open enrollment period that is compliant with the requirements of (e)(4)(i) and (ii). We are also amending 155.410(e)(4)(i) to add a reference to new paragraph (e)(4)(iii).

We are providing this flexibility in recognition of several commenters who cited the operational success of certain State Exchanges that have recently held open enrollment periods earlier than November 1 and requested that we reconsider providing an additional measure of flexibility. We do not intend to discourage operational success or generate negative downstream impacts (for instance, decreased enrollment or revenue) for any State Exchanges that held an open enrollment period that began before November 1, 2023, and ended before January 15, 2024, for the

2024 benefit year. We also seek to minimize the potential for significant disruption to Exchange operations currently in place to the extent possible consistent with this policy, as well as to minimize potential burden to Exchanges, consumers, and other interested parties (for instance, navigators, assisters, and issuers) acting in reliance on existing Exchange operations. We believe this modification to allow State Exchanges to grandfather the dates of their open enrollment period as described above strikes an appropriate balance between standardizing a minimum open enrollment period across Exchanges while minimizing operational disruption. This flexibility does not extend to State Exchanges that began open enrollment before November 1, 2023, and ended before January 15, 2024, for any benefit year other than the 2024 benefit year.

We summarize and respond to public comments received on the proposed policy below.

Comment: Many commenters cited the potential benefits of this policy, echoing some rationales that CMS provided including: helping to maximize the time consumers need to navigate plans and get assistance from Navigators/assisters; creating a more consistent window of consumer outreach; providing more time for consumers to take into account potential plan cost increases in January before enrolling; reducing consumer confusion about open enrollment periods due to consistency across Exchanges, including after an Exchange transition, and more seamless nationwide messaging to consumers given this consistency; allowing consumers to shop for coverage after the holiday season during which they may be busy and/or more financially-burdened; reducing administrative burdens on plans, assisters, and regulators; allowing for easier plan switching for auto-re-enrolled consumers; helping to increase Exchange enrollment; and eliminating the probability of truncated open enrollment periods in future benefit years. Several commenters asserted that this proposal would help maximize enrollment through greater alignment with the open enrollment periods for Medicare and employer-sponsored coverage.

Response: We thank commenters for their support of this proposal. We considered many of these potential benefits and appreciate the insight on others.

Comment: Many commenters appreciated that this policy provides the flexibility to extend open enrollment beyond January 15 of the benefit year. However, one commenter noted that allowing variation beyond January 15 of the benefit year undercuts the stated benefits of aligning open enrollment periods across Exchanges.

Response: While we acknowledge that there is, and may continue to be, variation in open enrollment end dates under this policy, we underscore that the policy still generally prescribes a consistent minimum time-period during which open enrollment will occur across Exchanges, which includes the 11 weeks between November 1 through January 15 for the vast majority Exchanges, as required under (e)(4)(ii), and at least 11 weeks for any State Exchange that has grandfathered its open enrollment period. We think this minimum period provides ample opportunity for consumers to select a plan and will provide an appropriate measure of consistency. We believe this policy strikes the appropriate balance of standardization and flexibility for State Exchanges since it allows for flexible open enrollment period end dates and grandfathering of existing open enrollment periods, while generally codifying a national minimum open enrollment period. We appreciate commenters that supported this aspect of the policy.

Comment: Many commenters, including those both opposing and supporting the proposal, asserted that States should have the flexibility to set their own open enrollment periods, stating that States are best positioned to decide on an open enrollment period that suits the needs of local markets and consumers, and/or that the proposal unnecessarily curtails State flexibility to set an appropriate open enrollment period. Several commenters argued specifically that States should maintain the flexibility to begin their open enrollment periods earlier than November 1 of the benefit year.

Response: We reiterate that this rule properly balances flexibility with uniformity. Currently, all Exchanges except one, including 18 State Exchanges, begin their annual open enrollment periods on November 1 of the calendar year preceding the benefit year, and therefore we thought that a mandatory November 1 open enrollment start date would minimize disruption for Exchanges while promoting consistency. Additionally, for the reasons described above and in the proposed rule, we believed it was important to extend the open enrollment period to January 15 for all Exchanges, but we are allowing States to end their open enrollment period later, if desired. Finally, paragraph (e)(4)(iii) provides flexibility by grandfathering the open enrollment periods for certain Exchanges, as described in more detail in this rule.

Comment: A few commenters expressed concern that the proposal provides too much flexibility to continue open enrollment indefinitely and should prescribe a deadline to prevent States from operationalizing a continuous open enrollment period throughout the year, which could impose financial burden and create adverse selection.

Response: We thank commenters for highlighting an important consideration. We believe States are best positioned to balance the benefits to their consumers of a longer open enrollment period with the market impacts of adverse selection when deciding when, on or after January 15, to end their open enrollment period.

Comment: One commenter recommended that Exchanges be prohibited from extending the annual open enrollment deadlines at the last minute, particularly toward the end of the open enrollment period, and that Exchanges should not deviate from their publicized open enrollment timeframes, to help prevent undue administrative burden and potential consumer confusion.

Response: We thank the commenter for highlighting an important operational consideration that Exchanges may wish to take into account in choosing when and how to end their open enrollment periods. We are not prohibiting State Exchanges from providing additional flexibility because unforeseen or exceptional circumstances (for instance, technical system issues that impact consumers' ability to enroll in coverage) may necessitate extending open enrollment to ensure consumers have the opportunity to enroll.

Comment: One commenter recommended that State Exchanges be provided the flexibility to set their own open enrollment periods after the first year of operating a State Exchange following a State Exchange transition.

Response: We are finalizing this policy to generally make consistent the open enrollment period across Exchanges, in part because it will reduce consumer confusion, especially after a State Exchange transition. While we have allowed some flexibility for Exchanges in the grandfathering provision of paragraph (e)(4)(iii), we have done so only to minimize disruption of existing open enrollment periods, and believe that moving towards more aligned open enrollment

periods going forward will benefit consumers and increase enrollment.

Comment: One commenter suggested that they would be amenable to a more flexible policy that simply prescribed a minimum number of open enrollment days or weeks. This commenter suggested that longer open hours or concentrated promotion during open enrollment may have a more significant impact than simply prescribing a specific time-period.

Response: We considered, but did not propose, this type of approach. We believe that the proposed policy better balances State flexibility with the benefits of consistency for consumers of generally requiring a national minimum open enrollment period upon which consumers can rely. We note one exception to this which will allow certain Exchanges to hold an 11 week open enrollment period consistent with the requirements of paragraph (e)(4)(iii).

Comment: One commenter suggested that current regulations already ''partially achieve'' the alignment of open enrollment periods across Exchanges and that this policy is, therefore, unnecessary.

Response: The goals of this policy are to largely align open enrollment periods across Exchanges and to capitalize on the benefits to consumers of a longer open enrollment period. Even if open enrollment periods are currently partially aligned, this rule will ensure that in the future, all Exchanges hold their open enrollment period between November 1 and January 15.[238]

Comment: Several commenters recommended that States be provided the flexibility to, or that CMS instead prescribe, an open enrollment period that ends no later than December 31 of the calendar year preceding the benefit year, to encourage consumers to enroll in a full 12 months of coverage.

Response: We reiterate the various benefits of requiring the open enrollment period to continue until at least January 15 of the benefit year. These include ensuring consumers are not subjected to plan cost increases that they may not be notified about until after open enrollment ends; giving Navigators, certified application counselors, and agents and brokers ample time to assist all interested applicants; providing consumers with additional time to enroll in coverage after the holiday season when they otherwise might be unable to as a result of financial or other limitations; and improving access to health coverage. Consumers who would like to, and are able to, enroll before December 31 still have that option, and Exchanges and interested parties may encourage consumers, through marketing, outreach, or other means, to obtain coverage for 12 months by enrolling before January 1. Therefore, we believe that requiring the annual open enrollment period to continue until at least January 15 of the benefit year best accommodates different consumer's needs.

Comment: A few commenters recommended that, in other rulemaking, CMS should consider requiring that short-term limited duration insurance coverage end by December 31 of a given plan year or that CMS should lengthen the period of short-term limited duration insurance beyond 3 months.

Response: We appreciate these comments on short-term limited duration insurance but note that term limits for such insurance is outside the scope of this rulemaking.

Comment: One commenter asserted that this proposal is unnecessary, as only the Idaho State Exchange held a shorter open enrollment period for the 2024 benefit year than what is required under this new policy, and that even Idaho's open enrollment period was sufficient in length.

Response: We thank the commenter for highlighting that this policy primarily would impact the operations of one State Exchange among all Exchanges nationally. To minimize disruption, we have finalized this policy by providing the flexibility for any State Exchange that began open enrollment before November 1, 2023, and ended before January 15, 2024, for the 2024 benefit year to continue to begin open enrollment before November 1 and end before January 15 for consecutive future benefit years, so long as the open enrollment period continues uninterrupted for at least 11 weeks, and unless this State Exchange later changes their open enrollment dates. This is to ensure alignment with the minimum number of weeks prescribed at paragraphs (e)(4)(i) and (ii) for any State Exchange that grandfathers its open enrollment period while not requiring that such a State Exchange hold a longer open enrollment period than other Exchanges. Aside from this flexibility, requiring a national minimum open enrollment period across Exchanges for the 11 weeks between November 1 and January 15 strikes an appropriate balance between providing State flexibility and ensuring substantial overlap of Exchange open enrollment periods nationwide. Finally, we underscore that this policy will generally codify this national minimum open enrollment standard moving forward.

17. Special Enrollment Periods

a. Effective Dates of Coverage (§ 155.420(b))

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82582), we proposed amending § 155.420(b)(1) and (b)(3)(i) to align the effective dates of coverage after selecting a plan during certain SEPs across all Exchanges, including State Exchanges, so that qualifying individuals or enrollees who select and enroll in a QHP during certain SEPs receive coverage beginning the first day of the month after the consumer selects a QHP. In order to consolidate and integrate the requirements in § 155.420(b)(3), without affecting any rights or obligations, we also proposed to include the requirements currently in paragraph (b)(3)(ii) into proposed paragraph (b)(3)(i) and to delete paragraph (b)(3)(ii).

In accordance with § 155.420(b)(3)(i), in the FFEs, SBE–FPs, as well as several State Exchanges, during a SEP, consumers who select a QHP through the Exchange to which regular effective dates specified in § 155.420(b) apply have the plan's coverage begin on the first day of the month after the consumer's selection. For example, if a consumer selects a QHP on March 31, their QHP coverage would start April 1.

However, in some State Exchanges, a consumer's coverage is only made effective on the first day of the month after the consumer has selected a plan during a SEP to which regular effective dates specified in § 155.420(b) apply if the consumer selects their plan between the 1st day and the 15th day of the previous month, per § 155.420(b)(1). In these State Exchanges, if a consumer selects a plan between the 16th day and the last day of the month, coverage will not become effective until the first day of the second month after plan selection. For example, for these State Exchanges, if a consumer selects a plan on March 1, Exchange QHP coverage would start April 1, but if that consumer selected a plan on March 16, their Exchange QHP coverage would start on May 1. This may result in a coverage gap of more than a month for these consumers.

As consumers typically qualify for SEPs due to a life event that may disrupt their previous coverage (such as a move to a new State, or a change in household

[238] Any Exchange availing itself of the grandfathering provision described in § 155.410(e)(4)(iii) will be required to hold an open enrollment period at least between November 1 and January 15 if their open enrollment period deviates from that set beginning after the effective date of this rule.

size due to birth or divorce, or a loss of other health insurance, such as a loss of Medicaid), these consumers are less likely to have health insurance coverage while they wait for their selected QHP coverage to begin.

In addition, when transitioning between Exchanges, such as from an Exchange in a State that operates on the Federal platform to a State Exchange that does not offer first-of-the-following-month coverage, consumers may expect that their coverage becomes effective on the first day of the month after selecting a QHP. These consumers might not be aware that the effective dates of coverage may differ between Exchanges, and they might not take appropriate steps to maintain or access alternate coverage while waiting for their QHP to become effective. As a result, these consumers may be at risk of coverage gaps due to the existing policies governing effective dates of coverage.

To address this, we proposed amending § 155.420(b)(1) and (b)(3)(i) to align effective dates of coverage across all Exchanges under these SEPs. We noted that the proposal would require all State Exchanges, beginning on January 1, 2025, or an earlier date at the option of the Exchange to provide coverage that is effective on the first day of the month following plan selection, if a consumer enrolls in a QHP during a SEP to which regular effective dates specified in § 155.420(b) apply.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to amend § 155.420(b)(1) and (b)(3)(i) to align the effective dates of coverage after selecting a plan during certain SEPs across all Exchanges, including State Exchanges, and to require qualifying individuals or enrollees who select and enroll in a QHP during certain SEPs to receive coverage beginning the first day of the month after the consumer selects a QHP. We are also finalizing the proposed modifications to incorporate section § 155.420(b)(3)(ii) into the proposed paragraph (b)(3)(i) and deleting paragraph (b)(3)(ii) for purposes of simplifying and streamlining this section. We summarize and respond to public comments received on the proposed policy below.

Comment: There was broad support for this proposal from many commenters, including health care providers, issuers, disease and general advocacy groups, and State Exchanges. Many of these commenters agreed with our assertion that requiring a regular effective date of coverage for SEPs that is no later than the first day of the month after plan selection would reduce the number of consumers who experience gaps in coverage. Several commenters also agreed that this proposal would ease the experience and reduce potential confusion for consumers who transition between Exchanges in different States, due to the standardization across States of when QHPs become effective under a SEP subject to regular coverage effective date rules. Some current State Exchanges noted that they observed that consumers in their States experienced fewer gaps in coverage after they adopted the effective dates of coverage that we propose here to require in all Exchanges.

Response: We appreciate, and agree with, the comments and additional information provided on how adoption of this proposal may benefit consumers.

Comment: One commenter opposed this proposal, stating that State Exchanges are best able to determine the appropriate coverage effective dates, and that State Exchanges should retain the flexibility to adopt earlier effective dates as they see appropriate. Another commenter supported the proposal but encouraged CMS to consider allowing States to have more flexibility in determining their own effective dates.

Response: This proposal does not change the existing ability for State Exchanges to elect an earlier coverage effective date under § 155.420(b)(3)(i) (as currently exists and as proposed). Due to the potential for consumers to face gaps in coverage under the existing policies governing regular SEP coverage effective dates in certain State Exchanges, we believe a regular SEP coverage effective date of no later than the first day of the month after plan selection is in the best interest of consumers.

Comment: One commenter stated that this policy would increase costs for State Exchanges. One commenter opposed this proposal, stating that we had not provided evidence as to why this rule change was needed. Another commenter opposed this proposal because it would expand the availability of SEPs, stating generally that SEPs encourage adverse selection, which may increase costs for health insurance issuers.

Response: As we note in the proposed rule, we expect that any costs to Exchanges and issuers would be minimal. We provided a cost estimate in section IV.C of the proposed rule that showed that issuers would not incur substantial new costs. The commenter did not provide evidence or examples of why a first of the month coverage effective date would cause adverse selection, nor have we received information from issuers that operate in State Exchanges that such coverage effective dates cause adverse selection. In addition, we believe the benefit of reducing coverage gaps among consumers outweighs any speculative harm.

Comment: One commenter stated that health insurance issuers may have operational concerns regarding State Exchanges that collect premium payments from enrollees on behalf of QHP issuers. The commenter stated that in these States, issuers sometimes face difficulty with data-sharing and determining if a consumer has made a binder payment for their coverage to become effective. As such, they are concerned that the shorter time until the effective date will not provide enough time to ensure a binder payment is paid prior to effectuating coverage.

Response: Although we did not hear from any current State Exchanges that they would have difficulty in implementing this proposal, we will provide any State Exchange with the appropriate technical assistance to ensure that they are able to implement this proposal while also promptly providing issuers with updates to Exchange enrollment or enrollee data so as not to adversely affect effectuation of coverage. If issuers receive binder payment confirmations after the effective date required by this new provision, they would be permitted to effectuate enrollment after the effective date, with coverage beginning retroactively to the required effective date. This is consistent with the premium payment policy for Exchanges on the Federal platform at § 155.400(e), which permits issuers to set binder payment deadlines after the coverage effective date.

Comment: One commenter suggested that HHS require that this policy begin in the 2024 plan year, rather than the 2025 plan year, stating that consumers now would benefit from an earlier implementation date. Another commenter requested that HHS delay the required implementation of this policy until January 1, 2026, so that State Exchanges would have more time to implement any needed technical changes in their enrollment systems. Finally, a commenter urged HHS to assist QHPs in addressing any operational challenges that come with the alignment of effective coverage dates.

Response: Because it will take time for the State Exchanges to update their enrollment systems to comply with this change, we do not believe it is appropriate to require State Exchanges to implement this policy before January

1, 2025, which is the date that many other provisions of this rule will go into effect. We believe that a January 1, 2025, effective date will give State Exchanges adequate time to make any system changes necessary to implement this rule. Additionally, we note that State Exchanges maintain the ability to offer an earlier coverage effective date under § 155.420(b)(3)(i) (as currently exists and as proposed) if desired. We will continue to provide technical assistance to State Exchanges to ensure that they are able to effectively implement this policy in coordination with their issuers.

Comment: One commenter suggested that we also permit Exchanges to provide an SEP when Medicaid ends before the end of the month and when a health provider leaves the QHP network mid-plan-year.

Response: In the Notice of Benefit and Payment Parameters for 2024, we finalized a modification to 45 CFR 155.420(b)(2)(iv) to allow Exchanges to offer earlier coverage effective dates for consumers attesting to a future loss of Minimum Essential Coverage (MEC) under § 155.420(d)(1). Specifically, we added language stating that if a consumer loses Medicaid or CHIP that is MEC, and a plan selection is made on or before the last day of the month preceding the loss of MEC, the Exchange must ensure that coverage is effective on the first day of the month in which the loss of MEC occurs.[239] This policy change was intended to mitigate coverage gaps and allow for a more seamless transition between coverage when consumers lose MEC mid-month. With regard to the second comment, we appreciate the suggestion to permit Exchanges to provide an SEP when a health provider leaves the QHP network mid-plan-year but note that it is not within the scope of this rulemaking.

b. Monthly Special Enrollment Period for APTC-Eligible Qualified Individuals With a Projected Annual Household Income At or Below 150 Percent of the Federal Poverty Level

At § 155.420, we proposed to amend paragraph (d)(16) to revise the parameters around the availability of a SEP for APTC-eligible qualified individuals with a projected annual household income at or below 150 percent of the Federal Poverty Level (FPL), hereinafter referred to as the ''150 percent FPL SEP.'' We proposed an amendment to the current text from ''no greater than'' to ''at or below'' for improved readability and understanding. Specifically, we proposed the removal of the limitation that this SEP is only available to a consumer whose applicable percentage, which is used to determine the amount of the consumer's premium not covered by APTC, is zero.

As background, in part 3 of the 2022 Notice of Benefit and Payment Parameters (86 FR 53429 through 53432), we finalized, at the option of an Exchange, a monthly SEP for APTC-eligible qualified individuals with a projected annual household income at or below 150 percent of the FPL. We also finalized a provision stating that this SEP is available only during periods of time during which APTC is available such that the applicable taxpayers' applicable percentage is set at zero, such as during tax years 2021 through 2025, as provided by section 9661 of the ARP and extended by the IRA.[240] We also amended § 147.104(b)(2)(i) to specify that issuers are not required to provide the SEP in the individual market with respect to coverage offered outside of an Exchange.

As a result of the enhanced financial assistance established by the ARP and extended by the IRA until December 31, 2025, many consumers with a projected annual household income at or below 150 percent of the FPL, have the opportunity to enroll in a much wider range of affordable coverage. Specifically, as a result of the legislative changes passed by Congress in the ARP and IRA, more consumers have access to Exchange and QHP coverage with zero-dollar premiums after financial subsidies, including more opportunities to enroll in zero-dollar silver-level plans with significant levels of CSRs. To provide these consumers—many of whom might have had difficulty enrolling during standard SEP timelines due to lack of awareness or other logistical difficulties—with the chance to access this generous Exchange coverage, we finalized the 150 percent FPL SEP.

We remain committed to ensuring that affordable Exchange coverage is available for individuals with lower household incomes and who are uninsured, and we believe that the availability of the 150 percent FPL SEP has made significant strides in ensuring that this population has real opportunities to enroll in free or extremely low-cost Exchange coverage.

Executive Order (E.O.) 14070, signed on April 5, 2022 (which expanded upon E.O. 15009 signed on January 28, 2021), directs Federal agencies to identify ways to continue to expand the availability of affordable health care coverage, to improve the quality of coverage, to strengthen benefits, and to help more Americans enroll in quality health care coverage. To that end, this proposed change may further ensure continued improved access to affordable coverage for this population.

Continuing to make this SEP available also may continue to help consumers who lose other MEC coverage, especially those disenrolling from Medicaid or CHIP coverage to regain health care coverage. We are aware of the challenges many consumers disenrolling from Medicaid or CHIP coverage have faced due to the end of the Medicaid continuous enrollment condition as of March 31, 2023. During this time period, we have observed, and expect to continue to observe, a higher than usual volume of individuals with lower household incomes transitioning from Medicaid or CHIP coverage to coverage through Exchanges due to the end of the Medicaid continuous enrollment condition. As discussed in our guidance released on January 27, 2023, consumers disenrolling from Medicaid or CHIP because of the Medicaid continuous enrollment condition are especially vulnerable and may face challenges with transitioning from Medicaid or CHIP into other forms of coverage, such as Exchange coverage.[241] These challenges may include consumers' confusion as to why their Medicaid coverage is ending due to irregular or untimely communications from State Medicaid agencies about the termination of coverage or coverage options for individuals with lower household incomes. Due to these factors, consumers may be unable to make an informed decision about their coverage options within the 60-day window provided by the SEPs at § 155.420(c)(1) and (d)(1) or within the 90-day window provided at the option of the Exchange at § 155.420(c)(6) beginning on January 1, 2024. Given our observations of these challenges, we believe that the existence of the 150 percent FPL SEP provides an additional safety-net, particularly for consumers impacted by the Medicaid continuous enrollment condition, but also generally for those who have historically faced challenges

[239] We note that this modification is not limited to situations where a consumer loses Medicaid or CHIP. For more information, see 88 FR. 25740, 25827.

[240] Public Law 117–169.

[241] CMS. (2023, Jan. 27). *Temporary Special Enrollment Period (SEP) for Consumers Losing Medicaid or the Children's Health Insurance Program (CHIP) Coverage Due to Unwinding of the Medicaid Continuous Enrollment Condition—Frequently Asked Questions (FAQ).* CMS. *https://www.cms.gov/technical-assistance-resources/temp-sep-unwinding-faq.pdf.*

transitioning from Medicaid or CHIP into other coverage, like Exchange coverage.

Finally, our experience with the 150 percent FPL SEP suggests that the policy has been successful. Based on our analysis, between October 2022 and August 2023, about 1.3 million consumers who reside in States with Exchanges on the Federal platform were APTC-eligible, had projected annual household incomes at or below 150 percent of the FPL, and enrolled in Exchange coverage under the 150 percent FPL SEP. In 2022, 41.8 percent of enrollees on Exchanges on the Federal platform had a projected annual household income of less than 150 percent of the FPL, compared to 46.9 percent of Exchange enrollees in 2023, after the implementation of the 150 percent FPL SEP. We believe the current 150 percent FPL SEP is one factor that significantly contributed to the increase in the enrollees on the Federal platform with a projected annual household income at or below 150 percent of the FPL.

In previous rulemaking, we expressed concern about offering the 150 percent FPL SEP when APTC does not always reduce the applicable percentage of a taxpayer with projected annual household income at or below 150 percent FPL to zero. We were also receptive to concerns raised by issuers that this SEP would impact the Exchange risk pool, lead to higher premiums, and impact the population with household incomes above 400 percent FPL with higher premium contributions as the APTC phases out. The possible increasing premiums also present a risk of financial hardship for consumers who purchase insurance off Exchange including those who are not eligible for APTC due to immigration status, or any other consumers who would purchase unsubsidized plans, or only receive small subsidies. At the time, we believed that the risk for adverse selection was mitigated because consumers would not have an incentive to drop their Exchange plans when healthy and resume coverage when sick using the 150 percent FPL SEP since they would be enrolled in zero-dollar premium plans due to the enhanced financial subsidies provided by the ARP and IRA. Previously, we estimated that the adverse selection risk may result in issuers increasing premiums by approximately 0.5 to 2 percent, and a corresponding increase in APTC outlays and decrease in income tax revenues of approximately $250 million to $1 billion annually, when the enhanced APTC provisions of the ARP (and later extended by the IRA) are in effect. While it is challenging to predict the future nature of the Exchanges in 2026, we estimate that some adverse selection, though unknowable at this time, may occur once enhanced subsidies sunset on December 31, 2025, and may result in issuers increasing premiums. We acknowledge that there is a wide range of predictions for an increase to premiums due to the adverse selection risk associated with this proposed change and discuss this further in the regulatory impact analysis section of this rule.

However, an analysis of the plans available to consumers in 2020, just before implementation of the enhanced subsidies, suggests that the risk of adverse selection we acknowledged may be lower than expected, and therefore, downstream impacts of that risk may be mitigated. When consumers with household incomes at or below 150 percent of the FPL are no longer eligible for enhanced subsidies, these consumers may still be eligible for low-cost silver or bronze plans with zero-dollar premiums after regular subsidies. In 2020, before the ARP provided enhanced financial assistance in the form of enhanced subsidies, about 900,000 consumers were enrolled in bronze plans, which were fully subsidized by APTC and where the consumer portion of premium was zero dollars. Additionally, in 2020, 77 percent of the consumer population at or below 150 percent FPL had access to a zero-dollar bronze plan with 16 percent of the same population having access to a zero-dollar silver plan in addition to the zero-dollar bronze plan. We believe that if the majority of consumers with income at or below 150 percent FPL would be eligible for a zero-dollar premium plan absent the enhanced subsidies provided under the ARP and IRA, then such consumers would be unlikely to use the proposed 150 percent FPL SEP in a way that caused adverse selection. In other words, we believe that the availability of these zero-dollar bronze plans for consumers at or below 150 percent FPL mitigates the risk pool impact this proposed change might cause in addition to mitigating downstream hardships for consumers who purchase insurance without subsidies or with only small subsidies.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed to remove the requirement that the SEP only be available during periods of time when the applicable taxpayer's applicable percentage for purposes of calculating the premium assistance amount, as defined in section 36B(b)(3)(A) of the Code, is set at zero. We summarize and respond to public comments received on the proposal below.

Comment: Many commenters agreed with the proposed removal of the limitation that this SEP is only available to a consumer whose applicable percentage, which is used to determine the amount of the consumer's premium not covered by APTC, is zero. Commenters agreed that this proposal reduces coverage gaps and promotes expanded access to affordable coverage, providing a needed benefit to those with the highest need for coverage. A few commenters stated that consistency of care is linked to improved health outcomes, particularly for cancer patients and survivors with limited incomes. One commenter specifically pointed out that the proposal helps promote equitable coverage. Additionally, several commenters believed that the availability of the 150 percent FPL SEP would help consumers facing a loss of Medicaid or CHIP coverage transition into Exchange coverage. Finally, a commenter also stated that the proposal would protect consumers from future changes to tax credit policy.

Response: We agree with commenters that the policy will benefit consumers by improving continuity of affordable coverage, which is vital for consumers with chronic health conditions, such as cancer, and especially benefits lower-income consumers. We also agree that the policy will help improve the transition from Medicaid and CHIP coverage to Exchange coverage for consumers facing a loss of Medicaid and CHIP coverage.

Comment: One commenter supported the proposed policy, but expressed concern that administrative hurdles, such as confusing qualification criteria, enrollment deadlines, and a lack of available information, prevent consumers from utilizing the 150 percent FPL SEP.

Response: We agree that the process for enrolling in coverage can be daunting, especially for lower-income consumers who may not be familiar with all of their options nor have the tools available to learn about them. We will continue to work with assisters, agents, brokers, and Navigators to educate consumers about this SEP and how to access it when applying for Exchange coverage.

Comment: Several commenters supported the proposed policy but asked HHS to consider increasing the income limit to benefit a greater number

of consumers and to better align with Medicaid and CHIP income limits, citing a lack of plan options with affordable premiums for consumers with projected annual household incomes between 150 to 250 percent of FPL. A commenter also urged HHS to consider expanding the SEP to consumers with projected annual household incomes up to 250 percent FPL so that more consumers could benefit from it.

Response: We acknowledge commenters' suggestion to make the 150 percent FPL SEP available to consumers with projected annual household incomes up to 250 percent of the FPL and appreciate the goal of broadening the pool of consumers who can access Exchange coverage. However, broadening the annual household income limit of the 150 percent FPL SEP may lead to adverse selection and cause unintended consequences, such as premium increases, for all Exchange enrollees with a projected annual household income above the SEP eligibility limit, particularly for those with a projected annual household income above the APTC eligibility limit (as any premium increases would not be offset by APTC). Thus, we believe that designing the SEP to target consumers with the lowest income—those with a projected annual household income at or below 150 percent FPL—allows for the greatest impact on the portion of the population that is generally vulnerable, as they are most likely to churn between Medicaid, CHIP and Exchange coverage, or experience gaps in coverage due to seasonal or temporary unemployment, if they have access to other coverage at all. Those who do not have access to other coverage may not seek out Exchange coverage for fear of the inability to pay, especially because their income tends to fluctuate. While consumers losing Medicaid, CHIP, or employer-sponsored coverage are eligible for an SEP under § 155.420(d)(1), consumers might be unaware that a loss of Medicaid or CHIP coverage is a qualifying life event and they may not report that loss of coverage to an Exchange and remain uninsured for potentially long periods of time until the next annual Open Enrollment period. The 150 percent FPL SEP provides an additional safety net for these vulnerable populations who often have lower health literacy and more frequent life stressors than other populations that would prevent them from enrolling in coverage when otherwise eligible. In addition, consumers with the lowest incomes are most likely to be eligible for zero-dollar plan options through the Exchange (if they are not eligible for Medicaid or CHIP), which may reduce the risk for adverse selection. Because the majority of otherwise eligible consumers with household incomes at or below 150 percent FPL would be eligible for a zero-dollar premium plan absent the enhanced subsidies provided under the ARP and IRA, then such consumers would be unlikely to use the proposed 150 percent FPL SEP in a way that causes adverse selection. In other words, the availability of zero-dollar bronze plans for consumers with household incomes at or below 150 percent FPL mitigates the risk pool impact of this policy in addition to mitigating downstream hardships for consumers who purchase insurance without subsidies or with only small subsidies.

Comment: A few commenters supported the proposed policy but asked HHS to consider requiring State Exchanges to adopt the SEP instead of allowing it to be elective, citing benefits such as a reduced number of uninsured consumers and decreased racial disparities in coverage.

Response: We believe in promoting health equity and reducing disparities when possible and appreciate commenters' suggestions that State Exchanges be required to adopt the 150 percent FPL SEP. However, we believe continuing to allow the adoption of the 150 percent FPL SEP to be elective for State Exchanges is the correct approach at this time because many States with State Exchanges have expanded Medicaid to cover individuals with current monthly household income up to 138 percent FPL, allowing a greater number of consumers to enroll in Medicaid, and thus have access to affordable coverage. Because of this, many States with State Exchanges have had less of a need to provide an Exchange enrollment pathway for consumers with projected annual household income below 150 percent FPL. We will continue to evaluate this policy and whether it would be beneficial to require State Exchanges to adopt the 150 percent FPL SEP in the future.

Comment: One neutral commenter acknowledged the improved readability of the proposed policy's change from ''no greater than'' to ''at or below'' 150 percent FPL.

Response: We thank the commenter for their response and agree the change in wording improves readability and understanding of which consumers are affected by the proposed policy change.

Comment: A commenter who neither supported nor opposed the proposed policy requested that HHS take additional time to evaluate the impact on premiums before finalizing the proposed policy change. The commenter cited concerns about adverse plan selection and impacts on the risk pool following the implementation of the proposal and recommended that HHS delay the proposal to gather additional data. Additionally, several commenters who were opposed to the proposed policy cited related concerns about the possible risk of ''anti-selection'' (a term we understand to refer to adverse selection) resulting in premium increases for consumers. A few commenters pointed out that implementing the policy change would encourage consumers to enroll in coverage only once they become sick or are in need of health care. Commenters pointed out that the resulting churn in and out of plans would ultimately harm the consumer, as it disrupts continuity of coverage. Commenters also expressed concerns that the policy as proposed would negatively impact the risk pool, disincentivize issuers from offering robust plan options given the challenges of managing the stability of the risk pool, and ultimately lead to narrower networks and limited consumer choice.

Response: As discussed in the proposed rule, our analysis of the plans available to consumers in 2020, just before implementation of the enhanced subsidies, suggested the risk of adverse selection may be lower than expected. This analysis, conducted in 2020 before the ARP provided enhanced financial assistance in the form of enhanced subsidies, found that about 900,000 consumers were enrolled in bronze plans, which were fully subsidized by APTC and where the consumer portion of the premium was zero dollars (referred to as zero-dollar bronze plans). Additionally, in 2020, 77 percent of Exchange consumers with projected annual household incomes at or below 150 percent FPL had access to a zero-dollar bronze plan with 16 percent of the same population having access to a zero-dollar silver plan in addition to the zero-dollar bronze plan. We believe that if the majority of consumers with projected annual household income at or below 150 percent FPL would be eligible for a zero-dollar plan absent the enhanced subsidies provided under the ARP and IRA, then such consumers would be unlikely to use the proposed 150 percent FPL SEP in a way that caused adverse selection because they would have no incentive to disenroll from a zero-dollar plan when healthy. In other words, we believe that the availability of these zero-dollar bronze

plans for consumers with projected annual household incomes at or below 150 percent FPL mitigates the risk pool impact of this change and the downstream hardships for consumers who purchase insurance without, or with limited, subsidies who would bear the cost of rising premiums. While there is a risk of adverse selection by the minority of consumers with projected annual household income at or below 150 percent FPL who would not be eligible for a zero-dollar plan, such adverse selection is projected to increase premiums by only 3 to 4 percent absent IRA subsidies, and therefore the benefits of this policy in increased access to coverage for low-income consumers outweighs the risk of premium increases for higher income consumers.

Given that the risks of premium increases and adverse selection are challenging to predict, we will work to ensure that any effects of these risks are minimal by continuing to promote strong enrollment on the Exchanges through outreach and advertising efforts.

Comment: A few commenters cautioned against the increased frequency and availability of SEPs, and overall eligibility enforcement, stating that the 150 percent FPL SEP currently exists alongside too many other similar SEPs, such as the Medicaid Unwinding SEP and the Loss of MEC SEP.

Response: We acknowledge and understand commenters' concerns that increasing the availability and frequency of SEPs makes it harder for Exchanges to enforce eligibility, and that too many similar SEPs exist concurrently. The policy goal of the 150 percent FPL SEP is to ensure that lower-income consumers are able to enroll in affordable Exchange coverage without remaining uninsured for potentially long periods of time by having to wait to enroll in coverage during the annual Open Enrollment period. As stated above, consumers with annual household income at or below 150 percent FPL are likely to not have access to other coverage, such as employer-sponsored coverage. Such consumers would generally not be eligible for other SEPs, such as the Newly Eligible for APTC or CSRs SEP (§ 155.420(d)(6)(i–ii)), which applies only to those currently enrolled in coverage, or the loss of minimum essential coverage SEP (§ 155.420(d)(1)), which would require them to have already been enrolled in minimum essential coverage such as Medicaid or CHIP (but not short-term limited duration plans). Additionally, consumers with annual household income at or below 150 percent FPL may be unlikely to seek out Exchange coverage during the annual open enrollment period due to low health literacy or a fear of the inability to pay, especially because their incomes tend to fluctuate. Therefore, for this population, the existence of the 150 percent FPL SEP provides an additional pathway into Exchange coverage that otherwise would be unavailable.

Comment: One commenter urged HHS not to finalize the proposed policy, stating it is unlawful. The commenter urged HHS instead to repeal the 150 percent FPL SEP policy.

Response: We do not agree with commenters that the 150 percent FPL SEP is unlawful. As discussed in prior rulemaking, section 1311(c) of the ACA requires the Secretary to establish the minimum uniform enrollment periods across all Exchanges; and section 1321(a) of the ACA provides broad authority for the Secretary to issue regulations setting standards to implement the statutory requirements related to Exchanges, QHPs, and other standards under title I of the ACA.[242]

18. Termination of Exchange Enrollment or Coverage (§ 155.430)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82584), we proposed to add § 155.430(b)(1)(iv)(D) to permit enrollees on Exchanges using the Federal platform to retroactively terminate their enrollment in a QHP through the Exchange[243] when the enrollee enrolls in Medicare Parts A or B (including enrollment in Parts A or B through a Medicare Advantage plan)[244] retroactively effective to the day before the date Medicare coverage begins. We also proposed making implementation of this proposal optional for State Exchanges. We are finalizing this proposal with three modifications: (1) we are limiting retroactive termination of QHP coverage to no earlier than the later of (a) the day before the first day of coverage under Medicare Parts A or B, and (b) the day that is 6 months before retroactive termination of QHP coverage is requested; (2) we are not permitting retroactive termination under § 155.430(b)(i)(iv)(D) of stand-alone dental plans (SADPs); and (3) we are allowing HHS to elect whether to implement this provision for Exchanges using the Federal platform. We are also finalizing the proposal to be optional for State Exchanges.

Currently, we do not permit enrollees in Exchanges on the Federal platform to retroactively terminate QHP coverage due to retroactive enrollment in other coverage, including Medicare. When coverage is retroactively terminated, claims submitted during the period of terminated coverage will be reversed by the QHP issuer and become the responsibility of the enrollee, who must ensure claims are submitted by the health provider to the new insurance provider, if coverage is effective retroactively.[245] State law would generally require that QHP issuers refund the enrollee any premiums paid during the months in which coverage is retroactively terminated.

Generally, consumers who become eligible for Medicare once they turn 65 can enroll prospectively, and those who are enrolled in Exchange coverage can normally terminate coverage prospectively so that there is no overlap between the two. In accordance with § 155.430(d)(2)(iii), Exchange enrollees may request same-day or prospective termination of coverage,[246] and Exchange communications instruct enrollees to terminate coverage once they learn they will be enrolled in other coverage to avoid an overlap. Exchange enrollees approaching their 65th birthday also receive communications from the Exchange advising them that they will be ineligible for APTC if they enroll in Medicare and instructing them to terminate Exchange coverage if they do not wish to have an overlap between the two. However, there are scenarios in which a consumer may retroactively enroll in Medicare Parts A or B coverage. For example, consumers can become eligible for retroactive Medicare Parts A and B due to retroactive eligibility for SSDI benefits, in which

[242] 86 FR 53438

[243] When an enrollee retroactively terminates QHP coverage, State law generally requires that the premiums paid in the months for which coverage is retroactively terminated be refunded by the QHP issuer.

[244] References throughout this provision to Medicare Parts A and B include Part C Medicare Advantage plans, which provide Parts A and B benefits.

[245] Providers are generally required to submit claims to Medicare no later than 12 months after the date of service. However, in situations where Medicare Part A or B entitlement did not exist at the time service was furnished, or the beneficiary receives notice of Medicare Part A or B entitlement after the date of service, the 12-month limit may be extended for 6 months following the month in which the beneficiary receives notice of Medicare Part A or Part B entitlement. CMS. (rev. 2023, Jan. 19). *Medicare Claims Processing Manual,* 100–04, Chapter 1, Section 70.7.2 ''Retroactive Medicare Entitlement.'' *https://www.cms.gov/regulations-and-guidance/guidance/manuals/downloads/clm104c01.pdf.*

[246] Although this regulation permits QHP enrollees to request prospective terminations, limitations in operations in the Exchanges on the Federal platform limit the ability of one enrollee in an enrollment group to end their coverage prospectively when the other enrollees in the group intend to remain enrolled.

case the consumer may enroll in Medicare Parts A and B beginning with the 25th month of SSDI entitlement (that is, receipt of the SSDI benefit). If the SSA determines the consumer to be eligible more than 25 months back, the consumer will receive Medicare Part A automatically beginning with the 25th month of SSDI entitlement and will have the option of enrolling in Part B Medicare retroactive to the 25th month of SSDI entitlement (though they also have the choice to enroll in Part B prospectively). In addition, when a consumer has not been automatically enrolled in Medicare Part A and applies for Medicare Part A after their 65th birthday, their entitlement to Part A begins (that is, when coverage starts) up to 6 months prior to the date of the application but no sooner than the consumer's 65th birthday.

Because consumers who retroactively enroll in Medicare Parts A or B may not be able to avoid an overlap in coverage by prospectively terminating their Exchange coverage, we believe it is appropriate to allow them to retroactively terminate Exchange coverage. Allowing consumers to request retroactive terminations in this scenario ensures they can minimize an overlap between Exchange and Medicare coverage and avoid paying premium unnecessarily (if the consumer owes premium after the application of APTC). However, we note that consumers would not be required to request a retroactive termination and could maintain both Exchange and Medicare coverage if they wish. Consumers who enroll in Medicare retroactively are not categorically excluded from PTC eligibility for the period of retroactive coverage, and thus may not be required to repay APTC for the months of overlap when they file their taxes, in accordance with 26 CFR 1.36B–2(c)(2)(iv); however, a QHP enrollee receiving APTC who is voluntarily requesting and is granted a retroactive QHP termination relieves the government of subsidizing two forms of coverage, as the APTC is recouped for the terminated QHP coverage months.

Although it is also possible for consumers to become retroactively eligible for Medicaid, and have an unavoidable overlap with Exchange coverage, we continue to believe it is appropriate to limit the applicability of this provision in the Exchanges on the Federal platform to Medicare. We previously allowed retroactive terminations of Exchange coverage due to enrollment in Medicaid, CHIP, and the BHP, but removed this option for the FFEs in the 2019 Payment Notice (83 FR 16930). This option was retained for State Exchanges and SBE–FPs, which as previously mentioned are more closely integrated into their State-administered Medicaid programs. In response to commenters who opposed this change, we noted that although consumers in these cases may wish to recoup premiums paid during the period of overlapping coverage, there is significant risk that providers who participate in the consumer's Exchange coverage do not participate in Medicaid, CHIP, or BHP, which would leave the consumer with unexpected out-of-pocket costs. However, because Medicare is accepted by many, if not most, providers, it is less likely that a retroactive QHP disenrollment would leave consumers responsible for claims incurred during the period of retroactive Medicare enrollment.

We note that in the FFEs and SBE–FPs, caseworkers have system-based evidence of both QHP and Medicare eligibility dates and would be able to verify that an enrollee requesting retroactive termination is enrolled in Medicare and approve retroactive requests. This would ensure that enrollees cannot retroactively terminate their QHP coverage for other, unauthorized reasons such as low utilization of coverage, which could create an adverse selection risk. We also note that, similar to retroactive Medicaid enrollment, a consumer's retroactive enrollment in Medicare will not cause the consumer, when filing taxes for the year of coverage, to have to repay APTC for the months in which the consumer, due to the retroactive Medicare enrollment, is enrolled in both a QHP with APTC and Medicare. See 26 CFR 1.36B–2(c)(2)(iv).

Because Medicare generally does not provide coverage for dental services, there is no overlap in services with an SADP when an enrollee retroactively enrolls in Medicare, as there is with a QHP, and we therefore clarify that requests for retroactive coverage under this provision are limited to QHPs. Allowing retroactive termination of SADPs would create a much greater risk of uncovered claims, since dental claims that were reversed by an issuer would likely not be covered under Medicare Parts A or B. However, we clarify that, due to the requirement that consumers must enroll in a QHP in order to enroll in an SADP, requests for retroactive termination of QHP coverage, which also involve prospective termination of the QHP, will result in prospective termination of SADP coverage.

Finally, in recognition of the challenges associated with retroactively adjusting coverage for preceding years, we proposed to require that enrollees must request retroactive termination of coverage within 60 days of the date they retroactively enroll in Medicare (that is, the date the enrollment occurs, not the Medicare coverage effective date).

We requested comments on this proposal. Specifically, we requested comment on whether the public benefits of this proposal to honor an enrollee's choice, recoup APTC for duplicative coverage, and protect the individual market risk pool outweighs the risk that an enrollee would be left with uncovered claims for the overlapping period. We also requested comment on the best way to ensure that enrollees have the necessary information to make an informed decision about whether to retroactively terminate coverage. In the proposed rule we noted that if this proposal is finalized, we intended to monitor the impact to minimize harm to consumers. We also sought comment on whether this provision should be mandatory for State Exchanges, rather than optional, and if so, how State Exchanges would verify retroactive Medicare enrollment dates.

After consideration of comments and for the reasons outlined in the proposed rule and in our responses to comments, we are finalizing the proposal to permit enrollees on Exchanges using the Federal platform and in State Exchanges to retroactively terminate their enrollment in a QHP through the Exchange when the enrollee enrolls in Medicare Parts A or B retroactively with the following modifications: (1) we are making explicit that our reference to enrollment in Medicare Parts A or B includes enrollment through a Medicare Advantage plan; (2) retroactive termination of QHP coverage under this provision is limited to earlier than the later of (a) the day before the first day of coverage under Medicare Part A or B or a Medicare Advantage plan, and (b) the day that is 6 months before retroactive termination of QHP coverage is requested; (3) we are not permitting retroactive terminations for SAPDs; and (4) we are allowing HHS to elect whether to implement this provision for Exchanges using the Federal platform.

As noted in the proposed rule (88 FR 82585), Exchanges on the Federal platform have system-based evidence of both QHP and Medicare eligibility dates and can verify Medicare enrollment. In addition, as noted in our response to commenters, we intend to explore ways to ensure that consumers are aware of the consequences of choosing to retroactively terminate coverage and are able to make an informed decision. Finalizing that this policy is at the option of the Exchanges on the Federal platform provides time to ensure these

processes are in place prior to effectuation of this provision. We also are finalizing the proposal to make implementation of this proposal optional for State Exchanges. Prior to implementation, we intend to provide advance notice to issuers and other interested parties through interested party webinars and published guidance such as the Federally-facilitated Exchange Enrollment Manual. We summarize and respond to public comments received on the proposal below.

Comment: Several commenters expressed support for the proposal, stating that it would be beneficial for consumers by allowing them to recoup premiums and avoid coordination of benefits issues, and would also decrease administrative burden on Exchanges and save the Federal Government money in recouped APTC. A few commenters indicated that this flexibility is especially important for certain groups of enrollees, such as those with disabilities and consumers who must pay premiums for Medicare Part A, for whom the ability to recoup QHP premiums is especially beneficial. Two State Exchange commenters stated that they had implemented this policy and had improved the consumer experience. An additional State Exchange and State Department of Insurance argued that this policy would give State Exchanges the flexibility to improve the consumer experience. One commenter stated that this proposal was important because consumers on the FFEs often have difficulty getting the correct termination date when transitioning to off-Exchange coverage such as Medicare.

Response: We agree that these changes will benefit consumers by allowing them to recoup premiums for Exchange coverage that overlaps with retroactive enrollment in Medicare and will benefit the Exchanges by allowing the government to recoup APTC for the period of retroactive termination. We also agree that these changes may be especially beneficial to certain groups of enrollees, such as those with disabilities, for whom recouping premium and avoiding coordination-of-benefit issues is particularly important. As noted by some commenters, it will also give State Exchanges the ability to improve the consumer experience by allowing retroactive terminations when desired by the enrollee. Lastly, although this proposal will enhance the consumer experience by enabling consumers to request retroactive termination of coverage when they retroactively enroll in Medicare, this proposal would not apply to consumers who become eligible for Medicare prospectively, and thus, is unlikely to impact the experience of most enrollees transitioning from Exchange to Medicare coverage.[247] We will continue to explore ways to improve the consumer experience for enrollees transitioning from Exchange to other coverage, including Medicare.

Comment: A few commenters opposed the proposal, stating that it would lead to confusion among enrollees because claims for services provided during the retroactive termination period would not be covered, and could lead to providers going unpaid if the service is not covered by Medicare or is furnished by a provider who does not participate in Medicare or Medicare Advantage. Several other commenters, while not opposing the proposal, expressed concerns that enrollees would not fully understand the implications of retroactively terminating coverage, including the reversal of claims by the QHP issuer and the impact on APTC. A few additional commenters stated that if payment rates for services were lower under Medicare than the QHP issuer, providers may attempt to bill enrollees for the difference. A few other commenters stated that this proposal could create problems regarding out-of-network claims implicated under the No Surprises Act, which would be subject to independent dispute resolution. One commenter requested that if the proposal is finalized, HHS create guidance materials for consumers to ensure they understand the potential benefits and drawbacks of retroactively terminating coverage in this scenario, including potential responsibility for claims reversed by the QHP issuer, and the fact that this scenario does not implicate APTC reconciliation.

Response: We believe it is important to minimize confusion among consumers who retroactively enroll in Medicare about the consequences of a decision to retroactively terminate Exchange coverage, and we intend to explore ways to ensure that enrollees have the necessary information to make an informed decision. In addition, we intend to closely monitor the impact of this provision after implementation and may make changes in the future if necessary to minimize harm to consumers, such as providing additional information on the factors consumers should consider before making the decision to retroactively terminate QHP coverage. As noted elsewhere, because Medicare is accepted by many, if not most, providers, we expect that claims made during the period of retroactive enrollment will be covered by the Medicare Fee-For-Service (FFS) program if the individual enrolls in the FFS program. However, there may be cases in which claims are not covered by Medicare or a Medicare Advantage plan and become the responsibility of the consumer. We intend to explore ways to ensure consumers are aware of this potential outcome so they can make informed decisions. We emphasize that retroactively terminating Exchange coverage is at the option of the consumer, and consumers who retroactively enroll in Medicare could choose to maintain QHP coverage.

Regarding the potential for Medicare beneficiaries[248] to be billed directly by providers and suppliers[249] when Medicare's payment rates are lower than those of the QHP issuer, we note there are several Medicare regulations that prohibit providers and suppliers from directly billing beneficiaries for amounts other than the applicable Medicare deductible and coinsurance.[250] In addition, in cases where a provider is not contracted with a Medicare Advantage plan, the provider would still be required to accept the amount they would have received under traditional Medicare as payment in full, and would be prohibited from billing the enrollee for the difference between the QHP and Medicare Advantage plan rates. Where providers are contracted with a Medicare Advantage plan, the provider is typically prohibited by the terms of their contract from balance billing the enrollee. Thus, in general, we anticipate that enrollees will not be balance billed, even when there is a difference between the payment rates of the old and new plans. As noted above, we will explore ways to ensure consumers are able to make an informed decision. In addition, as noted in the preamble to this provision, Medicare permits providers to submit claims more than 12 months after the date of service when an enrollee retroactively enrolls in Medicare, which minimizes the risk that providers will not be paid for claims for services provided during the retroactive period. Finally, regarding the No Surprises Act, we note that in the event

[247] Enrollees who attempt to end Exchange coverage prospectively but receive an incorrect termination due to a technical error may already be allowed to retroactively terminate coverage under § 155.430(b)(1)(iv)(A).

[248] The term ''beneficiaries'' is used here to align with Medicare regulations, which generally use this term rather than the term ''enrollee.''

[249] 42 CFR 400.202 defines the terms ''provider'' and ''supplier,'' the latter of which includes physicians.

[250] See 42 CFR 424.55, 414.48, and 489.21, and part 489, subpart C.

QHP coverage is retroactively terminated pursuant to § 155.430(b)(1)(iv)(D), any claims for items or services furnished during the retroactive period would be ineligible for the independent dispute resolution under the No Surprises Act because the item or service would no longer be furnished with respect to a group health plan or health insurance issuer offering group or individual health insurance coverage.[251]

Comment: A few commenters opposed the proposal, stating that it could increase the administrative burden on issuers, who would be required to recoup claim payments and reconcile enrollment information with the FFEs, and impact issuers' risk adjustment and payment integrity operations. One of these commenters also suggested that the proposed policy would ultimately lead to allowing retroactive terminations of QHP coverage for retroactive Medicaid enrollment. A few commenters also expressed concern that the proposal did not limit the number of months for which an enrollee can request retroactive terminations. Some of these commenters requested that retroactive terminations be limited to 6 months, even in cases where the consumer's Medicare coverage began more than 6 months retroactively, to limit the administrative burden on issuers to recoup claims and refund premiums. One of these commenters also stated that a 6-month limit would align with the 6-month extension to the 12-month limit to submitting claims to Medicare after the date of service.

Response: Although we recognize that QHP issuers may, in some cases, have difficulty recovering claims payments once coverage is retroactively terminated, they are generally entitled to do so. However, we agree that, because recovery of claims may be especially difficult for longer periods of retroactive termination, it is appropriate to place a limit on retroactive QHP terminations and are finalizing in this policy that requests for retroactive termination of QHP coverage are limited to no earlier than the later of (a) the day before the first day of coverage under Medicare Part A or B, and (b) the day that is 6 months before retroactive termination of QHP coverage is requested. One common retroactive enrollment scenario occurs when consumers first enroll in Medicare Part A or B after their 65th birthday, and whose entitlement to Part A starts up to 6 months prior to the date of enrollment (but no sooner than the consumer's 65th birthday). In this case a 6-month limit on requests for retroactive coverage would still allow these consumers to retroactively terminate QHP coverage back to the date of Medicare entitlement if the retroactive termination was requested on the same day as the Medicare enrollment. Although other consumers, such as those who enroll in Medicare retroactively due to SSDI entitlement, may not be able to retroactively terminate QHP coverage back to the date of Medicare entitlement if it occurs more than 6 months before the request for QHP retroactive termination, these consumers will still be able to receive up to 6 months of relief from paying double premiums. We believe this limit appropriately balances granting enrollees retroactive termination of coverage when desired, while not excessively burdening issuers, who must attempt to recoup claims payments whenever coverage is retroactively terminated.

Although providers must generally submit claims to Medicare no later than 12 months after the date of service, in certain situations where Medicare Part A or B entitlement did not exist at the time service was furnished and the beneficiary receives notice of retroactive Medicare Part A or B entitlement after the date of service, the 12-month limit may be extended through the last day of the 6th calendar month following the month in which the beneficiary receives notice of Medicare Part A or Part B entitlement.[252] Thus, this 6-month limit on retroactive QHP terminations is not necessary to ensure that providers are able to resubmit claims to Medicare and receive payment, and the risk that providers will not be paid for claims for services provided during the retroactive period is minimized.

For the comment raising potential concerns about impacts to risk adjustment from retroactive termination of coverage, we note that the EDGE server data collection requirements have always mandated that issuers of risk adjustment covered plans provide the most recent enrollment data for the applicable benefit year.[253] This most recent enrollment data would include any retroactive changes in enrollment, and will have the same impact on an issuer's risk adjustment data submission whether the retroactive enrollment changes are initiated by the issuer, Exchange, or enrollee.

Comment: A few commenters argued that allowing retroactive terminations in this scenario could increase the risk of adverse selection and lead to higher premiums for enrollees.

Response: We do not believe that implementation of this provision is likely to increase the risk of adverse selection or lead to higher premiums for enrollees. As we discussed in the preamble to this provision, we have the ability to verify Medicare enrollment and ensure that retroactive termination of coverage is limited to those who are enrolled in Medicare, and not consumers seeking retroactive termination due to low utilization of coverage, which could create an adverse selection risk. Although consumers with greater numbers of claims may be less likely to retroactively terminate QHP coverage, we note that in general the population of consumers who are eligible for Medicare already tend to have a high number of medical expenses and claims, and we do not expect that this policy will increase the risk of adverse selection or increase premiums. Lastly, we expect the population of enrollees who request retroactive termination of QHP coverage under this provision to be a small percentage of the overall enrolled population, and thus we do not expect it to have a noticeable impact on the overall Exchange, including the risk pool.

Comment: Several commenters, while not expressing support for or opposition to the proposal, expressed concern that it would be difficult for QHP issuers to recoup payments for services provided during the retroactive termination period, especially pharmaceutical, emergency room, and out-of-country claims, which may not be possible to recoup. Another commenter requested that, if the proposal is finalized, HHS consider reimbursing health plans at the commercial rate for any pharmaceutical expenses incurred during the retroactive termination period. Lastly, one commenter questioned how pharmaceutical claims would be handled for the retroactive termination period if the consumer did not enroll in Medicare Part D.

Response: Although we recognize that QHP issuers may, in some cases, have difficulty recovering claims payments once coverage is retroactively terminated, they are generally entitled to do so. As noted in a previous response, to limit the burden on issuers to recoup claims payments, we are also finalizing this proposal to limit retroactive termination of QHP coverage to no more than 6 months from the date that retroactive termination is requested.

[251] *See* section 2799A–1(c)(1)(A) of the PHS Act.

[252] See 42 CFR 424.44

[253] 45 CFR 153.710. See the EDGE Server Business Rules (ESBR) Version 24.0 (December 2023). *https://regtap.cms.gov/reg_librarye.php?i=3765.*

Furthermore, we also note that issuers must, in certain circumstances, recoup payment for medical or pharmaceutical claims, under the retroactive terminations allowed by current regulation. Because the number of consumers who retroactively enroll in Medicare and elect to retroactively terminate QHP coverage is limited, we do not expect this provision to significantly increase the number of claims for which issuers must recoup payment. Although it may be difficult for issuers to recoup payment for certain types of claims, such as pharmaceutical claims, we do not believe it is appropriate to reimburse issuers for these unrecoverable claims, nor is there authorization for us to do so. We note that issuers are, generally, still entitled to seek reimbursement from providers for claims that are reversed. In addition, we expect that consumers who retroactively enroll in traditional Medicare Parts A or B, but not a stand-alone Part D plan, will evaluate whether retroactively terminating QHP coverage is appropriate, given the likelihood that the costs for any pharmaceutical claims will become the consumer's responsibility. We also note that some Medicare Advantage plans include Part D prescription drug benefits, and enrollees in these Medicare Advantage plans may be able to have these claims resubmitted by the provider to the new plan. As noted elsewhere, we intend to explore ways to convey this information to consumers.

Comment: A few commenters recommended requiring State Exchanges to adopt this proposal, one of whom stated that all Medicare enrollees, regardless of their State of residence, should have this option available to them. Several commenters recommended making this proposal optional for State Exchanges, a few of whom argued that States were best positioned to evaluate their insurance markets and determine whether, and how, to implement this proposal. One State Exchange commenter indicated that it allows consumers who enroll in Medicare Parts A or B up to 6 months to request retroactive termination of QHP coverage and requested that HHS allow States to exceed the 60-day requirement proposed in the rule. Another State Exchange commenter noted that implementation of this proposal would require updates to enrollment and eligibility systems and manual verification of Medicare eligibility, and therefore may impose financial or operational burdens on issuers, who would be required to reverse claims and refund premiums. This commenter also requested that, if State Exchanges are required to implement the proposal, that the effective date be delayed so State Exchanges have additional time to implement this policy.

Response: Based on the comments we received from State Exchanges, which indicate that States have adopted different policies with regard to allowing consumers who retroactively enroll in Medicare to retroactively terminate QHP coverage, we believe it is appropriate to make adoption of this provision optional for State Exchanges. We agree with commenters who argued that States are best positioned to determine how to implement this proposal, given the difficulties of explaining to consumers how to decide whether to retroactively terminate QHP coverage, and the need to update enrollment and eligibility systems. In addition, State Exchanges may not have access to the same systems-based evidence of Medicare enrollment as the Exchanges on the Federal platform, which may make verification of retroactive Medicare enrollment more difficult. Because we are finalizing this rule to make implementation optional for State Exchanges and for HHS with respect to Exchanges that use the Federal platform, we do not believe it is necessary to delay the effective date of this provision.

Comment: A few commenters expressed support for the proposal and requested that it also be applied to enrollees who retroactively enroll in Medicaid or CHIP. Some of these commenters indicated that this was especially important given the ongoing process of Medicaid unwinding and the number of consumers being inappropriately disenrolled, in addition to the need to reinstate consumers who successfully challenge a denial of Medicaid eligibility and where there are delays in processing Medicaid applications. One of these commenters also requested that CMS publish data on the number of children enrolled in QHPs who are retroactively enrolled in Medicaid and CHIP, and that CMS issue guidance to States on how consumers who were inappropriately disenrolled from Medicaid or CHIP can be reimbursed for expenses.

Response: We recognize that consumers who are retroactively enrolled in other government programs such as Medicaid, CHIP, or the BHP, may also wish to retroactively terminate QHP coverage to eliminate an overlap in coverage and recoup QHP premiums. However, as we stated in the proposed rule and above, we do not believe it is appropriate to extend this provision to these enrollees because providers who participate in the consumer's Exchange coverage may not participate in Medicaid, CHIP, or BHP, increasing the risk that the consumer would be left with unexpected out-of-pocket costs. Because Medicare is accepted by many, if not most, providers, enrollees who retroactively enroll in Medicare and terminate Exchange coverage are less likely to become solely responsible for reversed claims. The comments regarding publication of Medicaid and CHIP enrollment data and reimbursement for consumers who are inappropriately disenrolled are outside the scope of this proposal, and we have not included substantive responses in this final rule.

Comment: One commenter expressed support for the proposal and requested that CMS allow all QHP enrollees who retroactively enroll in Medicare to retroactively terminate coverage, regardless of whether the Medicare enrollment was prospective or retroactive, or at least allow States to implement this. This commenter stated that it is especially important given the difficulty many FFE consumers have with the process of transitioning to off-Exchange coverage, where it is necessary to call the Call Center on the day the new coverage begins to end FFE coverage. Another commenter, who opposed the proposal, recommended that HHS allow ''pre-terminations'' for enrollees who become eligible for Medicare, so that they do not have to call the Marketplace Call Center to terminate QHP coverage on the day Medicare coverage begins.

Response: We recognize that consumers who are transitioning to off-Exchange coverage such as Medicare may, at times, have difficulty ending QHP coverage on the appropriate date. We are working to improve this process in the Exchanges on the Federal platform so that all enrollees have the option to terminate coverage prospectively when transitioning to off-Exchange coverage such as Medicare. However, we do not believe it is appropriate to extend this provision to all QHP enrollees who transition to Medicare. As we note in the preamble to this provision, consumers generally have the opportunity to enroll in Medicare prospectively, and Exchange enrollees approaching their 65th birthday receive communications from the Exchange advising them that they will be ineligible for APTC if they enroll in Medicare and instructing them to terminate Exchange coverage if they do not wish to have an overlap between the two. Furthermore, we note that many enrollees in Exchanges on the Federal

platform already have the ability to prospectively terminate coverage either online through their *HealthCare.gov* account or by calling the Marketplace Call Center.[254] Lastly, we note that consumers who attempt to end Exchange coverage and are given an incorrect coverage termination date due to a technical error may already receive retroactive terminations to correct the error, per § 155.430(b)(1)(iv)(A). We will continue to explore ways in which we can improve the consumer experience for those who are transitioning from Exchange to Medicare coverage.

Comment: Several commenters requested that HHS clarify or provide guidance on certain aspects of this proposal. A few commenters requested that HHS clarify whether issuers would have to refund APTC and premium payments for the months of retroactive coverage that are terminated. One of these commenters also asked HHS to provide guidance to issuers on how to handle changes in cost-sharing for consumers for the period of retroactive coverage termination. A third commenter requested guidance on how the proposal would impact the Medicare requirement to timely file claims within 12 months of the date of service. Several commenters asked that HHS provide operational guidance to issuers on how retroactive terminations under this provision should be handled and recommended that HHS promote alignment between the Exchanges and Medicare to ensure seamless transitions for consumers. Lastly, one commenter requested guidance on whether issuers would be liable for claims made during the 60-day window available to consumers to decide whether to retroactively terminate coverage.

Response: As with other retroactive terminations, issuers would be required to refund APTC to the government when an enrollee requests retroactive termination of coverage due to retroactive Medicare enrollment, and State law generally requires that issuers refund premiums as well. Once coverage is retroactively terminated, enrollees are responsible for contacting providers to ensure that any claims made during the retroactive period are resubmitted to Medicare, and differences in cost-sharing become the responsibility of enrollees, providers, and Medicare, as applicable. Although providers must generally submit claims to Medicare no later than 12 months after the date of service, in certain situations where Medicare Part A or B entitlement did not exist at the time service was furnished and the beneficiary receives notice of retroactive Medicare Part A or B entitlement after the date of service, the 12-month limit may be extended through the last day of the 6th calendar month following the month in which the beneficiary receives notice of Medicare Part A or Part B entitlement.[255] We also intend to provide guidance to issuers on how to process these retroactive terminations of coverage. As noted elsewhere in our response to comments, we intend to continue to work to improve the consumer experience for enrollees transitioning from Exchanges on the Federal platform to Medicare coverage. Lastly, with regard to the 60-day window, we note that this window is merely the amount of time consumers have to request a retroactive termination of coverage once they retroactively enroll in Medicare (the 60 days is from the date the consumer enrolls, not the effective date of coverage). Issuers are only responsible for claims to the extent that the enrollee remains in coverage, and if coverage is retroactively terminated, the issuer is generally entitled to recover payment for claims made during the period of retroactivity.

Comment: One commenter requested that HHS clarify that the proposal would not apply to SADPs, since Medicare Parts A and B generally do not provide dental benefits. This would ensure that SADP issuers are not required to recoup claims payments or refund premiums, and that enrollees must still terminate their SADP prospectively.

Response: As noted in the preamble to this provision, because Medicare generally does not provide coverage for dental services (although Medicare Advantage plans may include dental benefits as supplemental benefits), there is generally no overlap in coverage with an SADP when an enrollee retroactively enrolls in Medicare, as there is with a QHP. Therefore, we agree that it is appropriate to limit application of this provision to retroactive termination of QHP coverage. We clarify in this final rule that requests for retroactive coverage under this provision are limited to QHPs, and we have finalized this proposal to prevent retroactive termination of SADP coverage when a consumer retroactively enrolls in Medicare. Allowing retroactive termination of SADPs would create a greater risk of uncovered claims, since dental claims that were reversed by an issuer would likely not be covered under Medicare Parts A or B (although they may be covered as a supplemental benefit under a Medicare Advantage plan). However, we clarify that, on Exchanges on the Federal platform, due to the operational requirement that consumers must enroll in a QHP in order to enroll in an SADP, requests for retroactive termination of QHP coverage will result in prospective termination of SADP coverage.

19. Establishment of Exchange Network Adequacy Standards (§ 155.1050)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82585), we proposed to require that State Exchanges and SBE–FPs establish and impose quantitative time and distance QHP network adequacy standards that are at least as stringent as the FFEs' time and distance standards established for QHPs under § 156.230. We also proposed that State Exchanges and SBE–FPs be required to conduct quantitative network adequacy reviews prior to certifying any plan as a QHP, consistent with the reviews conducted by the FFEs under § 156.230. We further proposed to require State Exchanges and SBE–FPs permit issuers that are unable to meet the specified time and distance network adequacy standards to participate in a justification process after submitting their initial network adequacy data to account for variances and potentially earn QHP certification. In addition, we proposed a framework for granting State Exchanges and SBE–FPs an exception to the proposed quantitative network adequacy standards and review requirements if we determine that the Exchange applies and enforces quantitative network adequacy standards that are different from the FFEs' but ensure a level of access to providers that is as great as that ensured by the FFEs' network adequacy standards established for QHPs under § 156.230. Finally, we proposed to mandate that State Exchanges and SBE–FPs require all issuers seeking QHP certification to submit information to the State Exchange or SBE–FP about whether network providers offer telehealth services.

Understanding that some State Exchanges or SBE–FPs may need to promulgate regulations to comply with the proposed provisions requiring State Exchanges and SBE–FPs to impose quantitative network adequacy standards and conduct quantitative network adequacy reviews, as well as the requirement related to QHP issuer submission of telehealth information, we proposed that these provisions would be effective for plan years

[254] As noted by commenters, limitations in operations in the Exchanges on the Federal platform prevent one enrollee in an enrollment group from ending coverage prospectively when the other enrollees in the group intend to remain enrolled.

[255] See 42 CFR 424.44.

beginning on or after January 1, 2025, to accommodate the time it may take for a State Exchange or SBE–FP to come into compliance. We stated in the proposed rule that we are of the view that strong network adequacy time and distance standards across all Exchanges would enhance consumer access to quality, affordable care through the Exchanges. We refer readers to the proposed rule (88 FR 82586 through 82587) for a detailed background discussion of HHS' network adequacy policy and the network adequacy proposals.

a. Network Adequacy Standards and Reviews Across Exchanges

In the proposed rule (88 FR 82587), we stated that network adequacy is a key factor affecting consumers' access to care. We explained that while the FFEs impose uniform network adequacy standards across the States they serve that require QHP issuers to meet quantitative metrics, a similarly uniform network adequacy standard does not exist for States served by State Exchanges and SBE–FPs. Indeed, we further explained that these circumstances prompted the National Association of Insurance Commissioners to develop the NAIC Health Benefit Plan Network Access and Adequacy Model Act (Model Act).[256] The Model Act includes recommendations for qualitative network adequacy standards to which States could hold their issuers accountable and that require submission of access plans. We noted, however, that the Model Act does not specify what constitutes network adequacy, and, currently, only a few State Exchanges and SBE–FPs have adopted the full Model Act, resulting in the lack of a strong floor for network adequacy standards among State Exchanges and SBE–FPs.

We noted in the proposed rule (88 FR 82587) that State Exchanges and SBE–FPs currently have a mix of network adequacy policies in place, and approximately 25 percent of those fail to impose any quantitative standard. Quantitative network adequacy standards can be monitored relatively easily and applied objectively and may include standards that measure provider-to-enrollee ratios, time and distance, or appointment wait times.[257] On the other hand, a qualitative approach to network adequacy typically articulates a broad, general standard of adequacy and typically grants regulators or insurers discretion to determine how to measure compliance.[258] State regulators using this approach may require issuers to simply articulate how they determine and measure adequacy in their networks.[259] Once regulators approve an issuer's network adequacy plan using this approach, they then typically let issuers self-monitor their own compliance.[260] As opposed to conducting routine audits or requiring periodic reports of compliance, State regulators usually rely on consumer complaints to highlight situations that might require investigation.[261]

We stated in the proposed rule that, based on our experience conducting network adequacy reviews and regulating QHPs, as well as feedback from interested parties, including the many commenters who requested in the 2023 Payment Notice (87 FR 27334) that HHS extend Federal network adequacy standards to State Exchanges in future rulemaking, we are now of the view that no matter the State in which a QHP is offered, some quantitative analysis is necessary for an Exchange to objectively monitor network adequacy and determine whether a QHP provides enrollees in that State with access to an adequate network of providers.

Moreover, we stated that the proliferation in recent years of QHP issuers with narrower provider networks raises several consumer protection concerns. QHPs with narrower networks may lack access to specific provider specialties in-network, resulting in significant out-of-pocket expenses for consumers who must seek care out-of-network or resulting in consumers forgoing care to avoid these expenses. We noted that we have also been made aware, through communications with interested parties, of issues faced by consumers where in-network emergency physicians and mental health providers are in limited supply or, in the case of in-network emergency physicians, not available at in-network hospitals. Additionally, we stated that the proliferation of narrower networks risks consumers being enrolled in plans whose networks do not have sufficient capacity to serve them or whose providers are too geographically dispersed to be reasonably accessible.

Therefore, we proposed (88 FR 82587) to establish a national floor of quantitative network adequacy standards and network adequacy reviews. We stated in the proposed rule that although a number of State Exchanges and SBE–FPs have taken meaningful steps towards ensuring the adequacy of QHP networks, we are of the view that every Exchange should apply quantitative network adequacy standards and conduct a thorough review and analysis of issuer compliance with these standards to effectively evaluate the adequacy of QHP networks in order to ensure that all consumers, regardless of which State they live in, have timely access to providers to manage their health care needs.

b. Proposals Related to State Exchange and SBE–FP Network Adequacy Standards and Reviews

i. Quantitative Network Adequacy Time and Distance Standards

For plan years beginning on or after January 1, 2025 and future plan years, we proposed that State Exchanges and SBE–FPs must (1) establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230; and (2) conduct reviews of a plan's compliance with those quantitative network adequacy standards prior to certifying any plan as a QHP, consistent with the manner in which the FFEs review the network adequacy of plans under § 156.230. For purposes of this proposed policy, we stated in the proposed rule that ''at least as stringent as'' means time and distance standards that use a specialty list that includes at least the same specialties as our provider specialty lists and time and distance parameters that are at least as short as our parameters. We explained that States would be permitted to implement network adequacy standards that are more stringent than those performed by the FFEs under § 156.230. In other words, States could use a specialty list that is broader than our specialty lists, but it must include all the provider specialties included in our lists. Similarly, we explained that the time and distance parameters could also be narrower than our parameters, meaning they could require shorter time and/or distances, but they cannot be less demanding than our time and distance parameters.

In the proposed rule, we stated that quantitative time and distance standards help strengthen QHP enrollees' timely access to a variety of providers to meet their health care needs, which in turn helps ensure that enrollees can receive

[256] Health Benefit Plan Network Access and Adequacy Model Act. (2015, 4th Quarter). *https://www.nh.gov/insurance/legal/documents/naic_model_act_network_adequacy.pdf.*

[257] Hall, Ginsburg. (2017, Sep.). A Better Approach to Regulating Provider Network Adequacy. *https://www.brookings.edu/wp-content/uploads/2017/09/regulatory-options-for-provider-network-adequacy.pdf.*

[258] Id.

[259] Id.

[260] Id.

[261] Id.

health care services without unreasonable delay. Additionally, we stated that quantitative time and distance standards, when varied by county type, provide a useful assessment of whether QHPs provide reasonable access to care and a more comprehensive evaluation of the adequacy of QHPs' networks.

In the 2023 Payment Notice (87 FR 27322), we adopted time and distance standards that the FFEs would use to assess whether plans to be certified as QHPs in the FFEs meet network adequacy standards. The proposed provider specialty lists for time and distance standards for PY 2023 were informed by prior HHS network adequacy requirements, consultation with interested parties, and other Federal and State health care programs, such as Medicare Advantage and Medicaid. The provider specialty lists that were finalized for PY 2023 covered more provider types than previously evaluated under FFE standards so that QHP networks would be robust, comprehensive, and responsive to QHP enrollees' needs. In the proposed rule (88 FR 82588), we stated that we believe these provider specialty lists promote access to a variety of provider types and, as a result, strengthen consumer access to health care services without unreasonable delay. To establish a national floor for quantitative network adequacy standards, we proposed that the provider specialty list that State Exchanges and SBE–FPs use must include, at a minimum, the providers in the provider specialty lists for the FFEs that were applicable to PY 2023. Those lists are included in the preamble of this final rule, in Tables 9 and 10.

Consistent with the standards for the FFEs, and to strengthen QHP enrollees' timely access to a variety of providers to meet their health care needs, we proposed that State Exchanges and SBE–FPs' time and distance standards would be calculated at the county level and vary by county designation. We proposed that State Exchanges and SBE–FPs would be required to use a county type designation method that is based on the population size and density parameters of individual counties. We further stated that under our proposal, the time and distance standards State Exchanges and SBE–FPs would establish and impose would apply to the provider specialty lists contained in the proposed rule (Tables 9 and 10 in the preamble of this final rule). We explained that to count towards meeting the time and distance standards, individual and facility providers listed in Tables 9 and 10 would have to be appropriately licensed, accredited, or certified to provide services in their State, as applicable, and would need to have in-person services available.

TABLE—INDIVIDUAL PROVIDER SPECIALTY LIST FOR TIME AND DISTANCE STANDARDS

Individual specialty types
Allergy and Immunology
Cardiology
Cardiothoracic Surgery
Chiropractor
Dental
Dermatology
Emergency Medicine
Endocrinology
ENT/Otolaryngology
Gastroenterology
General Surgery
Gynecology, OB/GYN
Infectious Diseases
Nephrology
Neurology
Neurosurgery
Occupational Therapy
Oncology—Medical, Surgical
Oncology—Radiation
Ophthalmology
Orthopedic Surgery
Outpatient Clinical Behavioral Health (Licensed, accredited, or certified professionals)
Physical Medicine and Rehabilitation
Physical Therapy
Plastic Surgery
Podiatry
Primary Care—Adult
Primary Care—Pediatric
Psychiatry
Pulmonology
Rheumatology
Speech Therapy
Urology
Vascular Surgery

TABLE 10—FACILITY SPECIALTY LIST FOR TIME AND DISTANCE STANDARDS

Facility specialty types
Acute Inpatient Hospitals (Must have Emergency services available 24/7)
Cardiac Catheterization Services
Cardiac Surgery Program
Critical Care Services—Intensive Care Units (ICU)
Diagnostic Radiology (Freestanding; hospital outpatient; ambulatory health facilities with Diagnostic Radiology)
Inpatient or Residential Behavioral Health Facility Services
Mammography
Outpatient Infusion/Chemotherapy
Skilled Nursing Facilities
Surgical Services (Outpatient or ASC)
Urgent Care

We stated in the proposed rule that the county-specific time and distance parameters that QHPs would be required to meet would be detailed in future guidance, namely, the annual CMS Letter to Issuers in the Federally-facilitated Exchanges. We stated that we would consider industry standards in developing these standards.

ii. Quantitative Network Adequacy Reviews

For plan years beginning on or after January 1, 2025, we proposed (88 FR 82590) that State Exchanges and SBE–FPs be required to conduct quantitative network adequacy reviews prior to QHP certification, and that they conduct them consistent with network adequacy reviews conducted by the FFEs under § 156.230. Specifically, we proposed that State Exchanges and SBE–FPs would be required to conduct, prior to QHP certification, quantitative network adequacy reviews to evaluate compliance with requirements under § 156.230(a)(1)(ii) and (iii), and (a)(2)(i)(A), while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4). We stated in the proposed rule that under this proposal, State Exchanges and SBE–FPs would be prohibited from accepting an issuer's attestation as the only means for plan compliance with network adequacy standards. We further proposed that State Exchanges and SBE–FPs would make available to SADP applicants the limited exception available to SADPs under § 156.230(a)(4) pursuant to which SADPs may not be required to meet FFE network adequacy standards under § 156.230(a)(4), for the same reasons we made this exception available in the FFEs in the 2024 Payment Notice (88 FR 25878 through 25879). This exception is not available to medical QHP issuers.

iii. Quantitative Network Adequacy Review Justification Process

In the proposed rule (88 FR 82590), we acknowledged that State-specific challenges may necessitate exceptions, and so we proposed to require State Exchanges and SBE–FPs to permit issuers that are unable to meet the specified standards to participate in a justification process after submitting their initial data to account for variances, consistent with the processes specified under § 156.230(a)(2)(ii) and (a)(3) and (4). We noted that State-specific challenges could include barriers beyond an issuer's control, such as provider supply shortages or topographic barriers.

We stated in the proposed rule that the issuer would include this justification as part of its QHP application and describe how the plan's provider network provides an adequate level of service for enrollees and how the plan's provider network will be strengthened and brought closer to compliance with the network adequacy standards prior to the start of the plan year. We further stated that the issuer would be required to provide information as requested by the State Exchange or SBE–FP to support this justification. We also explained that State Exchanges and SBE–FPs would be required to review the issuer's justification to determine whether making such health plan available through the Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates as specified under § 156.230(a)(3). We further explained that in making this determination, the factors State Exchanges and SBE–FPs could consider include whether the exception is reasonable based on circumstances such as the local availability of providers and variables reflected in local patterns of care. We stated that if the State Exchange or SBE–FP determines that making such health plan available through its Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates, it could then certify the plan as a QHP.

iv. Exception Process for State Exchanges and SBE–FPs

In the proposed rule (88 FR 82590), we stated that we are aware that some States Exchanges employ robust, quantitative network adequacy standards that differ from those used by the FFEs, but still ensure that QHPs provide consumers with reasonable, timely access to practitioners and facilities to manage their health care needs, consistent with the ultimate aim of these proposals. Accordingly, we proposed a framework for granting exceptions to the requirements that State Exchanges and SBE–FPs establish and impose network adequacy time and distance standards for QHPs that are at least as stringent as the standards applicable to QHPs in FFEs and conduct quantitative network adequacy reviews that are consistent with those carried out by the FFEs under § 156.230. We proposed that HHS could grant State Exchanges and SBE–FPs an exception if it determines that the Exchange applies and enforces quantitative network adequacy standards that are different from the FFEs' but ensure reasonable access as defined under § 156.230. We also proposed that the exception would be available only to State Exchanges and SBE–FPs that conduct quantitative reviews of network adequacy prior to certifying plans as QHPs. We further proposed that Exchanges seeking to employ alternative network adequacy standards would be required to submit an exception request, in a form and manner specified by HHS, and to support their exception request with evidence-based data demonstrating that such standards ensure access as defined under § 156.230.

For example, we explained that if a State were to provide quantitative evidence that their network adequacy time and distance standards that measure access by service types provide consumers with equal access to providers as the Federal network adequacy standards under § 156.230 that measure access by provider types, we may grant the respective State's request for an exception from measuring access by provider types. Additionally, we explained that if a State were to use different county type designations than the five county type designations that we use to assess QHP time and distance standards at the county level (that is, Large Metro, Metro, Micro, Rural, CEAC), we would consider the respective State's request for an exemption from using the same five county type designations only if the State were to provide evidence that their alternative county type designations provide consumers with equal access to providers as the Federal network adequacy standards under § 156.230. We stated that alternative quantitative network adequacy standards that we would review for potentially qualifying for the exemption must be supported by evidence-based data, demonstrating that such standards provide enrollees with a level of access to providers that is equal to or greater than that ensured by the FFE network adequacy standards under § 156.230.

Although we proposed to establish minimum standards related to network adequacy in the proposed rule, we solicited comment on how States may be able to develop a combination of data-driven quantitative and qualitative standards, developed with input from interested parties, to assess network adequacy. In the 2020 Medicaid Program; Medicaid and Children's Health Insurance Program (CHIP) Managed Care final rule (85 FR 72754, 72802), we provided States the flexibility to develop quantitative network adequacy standards for determining network adequacy. In that rule, we noted that in some situations, time and distance may not be the most effective type of standard for determining network adequacy and that some States have found that the time and distance analysis produces results that may not accurately reflect provider availability. For example, a State that has a heavy reliance on telehealth in certain areas of the State may find that a health care provider-to-enrollee ratio is more useful in measuring meaningful access to all services without unreasonable delay, as the time it would take the enrollee, and the distance the enrollee would have to travel, to access the provider in-person could be well beyond applicable time and distance standards, but the enrollee may still be able to easily and quickly access many different providers on a virtual basis (85 FR 72802). In the proposed rule, we sought comment on how we should administer the process for Exchanges to apply for these exceptions, including the appropriate timelines, and the data that would be required to be submitted as part of the exception request. We also sought comment on how we should evaluate the provider access offered by QHP issuers in a State that requests an exception to establish and impose quantitative network adequacy standards that are different from the FFEs', whether and how to measure the access provided by those different standards over time, and how long an approved exemption should last.

In the proposed rule, we stated that to ensure compliance with these proposed quantitative time and distance QHP network adequacy standards and review requirements, we would coordinate with State Exchanges and SBE–FPs to provide technical assistance to support their compliance with the requirements of this policy and work with them should it be necessary to remedy any gaps in compliance. However, we stated that if a State Exchange or SBE–FP fails to comply with these standards, we

could seek to take remedial action under our authorities related to Exchange program integrity.

c. Proposal Related to QHP Reporting on Telehealth Services

We proposed (88 FR 82591) to require State Exchanges and SBE–FPs to require that all issuers seeking certification of plans to be offered as QHPs submit information to the respective State Exchanges or SBE–FPs about whether network providers offer telehealth services. We proposed that this requirement would be applicable beginning with the QHP certification cycle for PY 2025. We stated in the proposed rule that this data would be for informational purposes; it would be intended to help inform the future development of telehealth standards and would not be displayed to consumers. We also stated that this information could be relevant to State Exchange and SBE–FP analysis of whether a QHP meets network adequacy standards. We noted that this proposal is not intended to suggest that telehealth services would be counted in place of in-person service access for the purpose of State Exchange and SBE–FP issuers meeting time and distance network adequacy standards for PY 2025. We explained that while we acknowledge the growing importance of telehealth, we want to ensure that telehealth services do not reduce the availability of in-person care.

We explained that for the purpose of this proposal, telehealth encompasses professional consultations, office visits, and office psychiatry services delivered through technology-based methods, including virtual check-ins, remote evaluation of pre-recorded patient data, and inter-professional internet consultations. We noted that, currently, for issuers in FFEs to comply with telehealth reporting standards, issuers must indicate whether each provider offers telehealth with the options ''Yes,'' ''No,'' or ''Requested information from the provider, awaiting their response.'' We proposed that State Exchanges and SBE–FPs would be required to impose this requirement on issuers when issuers submit provider information.

We sought comment on this proposal, including comments on how we might incorporate telehealth availability into network adequacy standards in future plan years.

d. Additional Network Adequacy Standards

To reduce burden on State Exchanges and SBE–FPs that are not yet conducting quantitative network adequacy reviews, we did not propose that State Exchanges and SBE–FPs enforce appointment wait time standards or that State Exchanges and SBE–FPs ensure that the provider network of each QHP meets applicable standards specified in § 156.230(b) through (e). However, we sought comment to inform any potential future enforcement of appointment wait time standards as well as the standards specified in § 156.230(b) through (e) and stated that we looked forward to capturing a wide range of perspectives on these topics from various interested parties. We stated that we were especially interested in comments about how State Exchanges and SBE–FPs may enforce quantitative network adequacy standards for appointment wait times, as well as the impact enforcing these standards may have on issuers and consumers.

We also sought comment on our proposal for State Exchanges and SBE–FPs to establish and impose quantitative time and distance QHP network adequacy standards that are at least as stringent as the FFEs' time and distance standards established for QHPs under § 156.230 and to conduct quantitative network adequacy reviews, prior to QHP certification, that are consistent with the reviews conducted by the FFEs under § 156.230, including comment on whether we should amend § 156.230 in addition to § 155.1050 to directly apply the same standards applicable to issuers on FFEs to issuers in State Exchanges and SBE–FPs for plan years beginning on or after January 1, 2025.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing these proposals with a clarification to the exception process and a modification to require implementation for plan years beginning on or after January 1, 2026.

First, under § 155.1050(a)(2)(i)(A), we are finalizing that for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A).

Second, we are finalizing that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews prior to certifying any plan as a QHP, consistent with the reviews conducted by the FFEs under § 156.230. Specifically, we are finalizing at § 155.1050(a)(2)(i)(B) that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct network adequacy reviews to evaluate a plan's compliance with network adequacy standards under § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(2)(i)(A) prior to certifying any plan as a QHP, while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4).

Third, we are finalizing § 155.1050(a)(2)(ii) to provide that, for plan years beginning on or after January 1, 2026, HHS may grant an exception to the requirements described under § 155.1050(a)(2)(i) to a State Exchange or SBE–FP that demonstrates with evidence-based data, in a form and manner specified by HHS, that (1) the Exchange applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4); and (2) the Exchange evaluates whether plans comply with applicable network adequacy standards prior to certifying any plan as a QHP. In this final rule, for this exception process, we are clarifying that, for (1) above, the Exchange will need to demonstrate that it applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4), and not § 156.230 generally, to reinforce that issuers on the State Exchanges and SBE–FPs do not need to comply with the appointment wait time standards under § 156.230(a)(2)(i)(B) under this policy.

Lastly, we are finalizing § 155.1050(a)(2)(i)(C) to provide that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must require that all issuers seeking certification of a plan as a QHP submit information to the Exchange reporting whether or not network providers offer telehealth services.

In preparation for PY 2026, we will begin communicating and coordinating with State Exchanges and SBE–FPs through the provision of technical assistance. Specifically, during PYs 2024 and 2025, we will work closely with State Exchanges and SBE–FPs on their plans to comply with these network adequacy requirements for plan years beginning on or after January 1, 2026.

We summarize and respond below to public comments received on these proposals.

Comment: Many commenters expressed support for the proposal that State Exchanges and SBE–FPs: (1) establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A); and (2) conduct reviews of a plan's compliance with those quantitative network adequacy standards prior to certifying any plan as a QHP, consistent with the manner in which the FFEs review the network adequacy of plans under § 156.230.

Response: We appreciate the commenters' support for this proposal.

Comment: Many commenters expressed general support for the creation of a Federal floor for network adequacy standards or standardization of network adequacy standards across States. Commenters indicated that the imposition of standardized quantitative time and distance network adequacy requirements across States, particularly in States that do not currently impose quantitative time and distance network adequacy requirements or that impose requirements that are less stringent than the FFEs', is valuable because it increases access to providers and services. Commenters stated that the imposition of these requirements will do so by for example, decreasing disparities in access across States, and requiring States that have not implemented quantitative network adequacy standards to do so. One commenter also stated that ''the establishment of stringent network adequacy standards is critical in ensuring continual access to high-quality dental care and incentivizing fair negotiations between insurers and dental providers during the network contracting process.'' Some of these commenters suggested alternatives to the proposed approach such as suggesting that the floor be qualitative in nature, that it be methods-based and not metrics-based, and that CMS work with State Exchanges and SBE–FPs to harmonize standards across States rather than extending the FFE network adequacy standards as a national floor.

Response: We appreciate the support for our proposals and agree with the benefits raised by commenters. We are finalizing these policies as proposed with a modification to the implementation date and a clarification to the exception process, as previously discussed. While we appreciate commenters suggesting a qualitative approach or a methods-based one, which we believe may refer to approaches that impose standards that only require States or issuers to have processes in place to ensure network adequacy, we believe quantitative network adequacy standards, unlike qualitative or other methods-based approaches, can be monitored relatively easily and applied objectively. By contrast, qualitative or other methods-based approaches to network adequacy typically articulate a broad, general standard of adequacy and grant regulators or insurers discretion to determine how to measure compliance. State regulators using these approaches may require issuers to attest to meeting the network adequacy standards or allow the issuers to self-monitor compliance with the standards in a different way. As opposed to conducting routine audits or requiring periodic reports of compliance, State regulators using these approaches usually also rely on consumer complaints to highlight situations that might require investigation. Based on our experience conducting network adequacy reviews and regulating QHPs, as well as feedback from interested parties, we are of the view that no matter the State in which a QHP is offered, some quantitative analysis is necessary for an Exchange to objectively monitor network adequacy and determine whether a QHP can provide enrollees access to an adequate network of providers.

Additionally, harmonizing network adequacy standards across States would prevent States from enforcing quantitative network adequacy standards that are more stringent than the FFEs' standards or from using the exception process under § 155.1050(a)(2)(ii) to enforce standards that they determined are in the best interest of their consumers. We are of the view that setting the FFEs' quantitative time and distance network adequacy standards as a national floor strikes an appropriate balance of providing States with these important flexibilities while also ensuring that all consumers, regardless of which State they live in, have timely access to providers to manage their health care needs.

Comment: Many commenters offered recommendations about additional provider and facility specialty types that should be subject to the time and distance standards, such as academic cancer centers, essential community hospitals, substance use disorder treatment providers, and reproductive health providers, as well as recommendations about changes to the time and distance metrics such as changes to the number of minutes/miles associated with time and distance standards for certain specialties.

Response: We are not inclined to add additional provider types to the individual and facility provider specialty lists for time and distance standards at this time. The provider specialty lists we proposed are the same lists we finalized for FFE issuers in the 2023 Payment Notice (87 FR 27325). Those specialty lists were informed by prior HHS network adequacy requirements, consultation with interested parties, and other Federal and State health care programs, such as Medicare Advantage and Medicaid, and those lists covered more provider specialty types than previously evaluated under FFE standards so that QHP networks would be robust, comprehensive, and responsive to QHP enrollees' needs. We continue to believe that those provider specialty lists promote access to a variety of provider types and, as a result, strengthen consumer access to health care services without unreasonable delay. Until we have more experience with the impact of the specialty lists, we finalize in this rule on QHP issuers in State Exchanges and SBE–FPs, adding additional providers to the specialty lists would be premature and may impose burdens on QHP issuers that we have not fully evaluated. Therefore, at this time, we do not believe that it is appropriate to include additional provider types in these specialty lists.

Our time and distance metrics for network adequacy are based on Medicare Advantage standards and were designed with careful consideration of other network adequacy standards, including those of individual States, accrediting entities, and Federal health care programs. Until we can more fully assess the impact of the time and distance standards, we finalize in this rule on QHP issuers in State Exchanges and SBE–FPs, we believe that modifying those standards would also be premature and may impose burdens on QHP issuers that we have not fully evaluated. We will further research commenters' recommended changes to our time and distance metrics as well as their implications and may consider them in future rulemaking.

Comment: Many commenters also opposed the proposal that State Exchanges and SBE–FPs (1) establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A); and (2) conduct reviews of a plan's compliance with those quantitative network

adequacy standards prior to certifying any plan as a QHP, consistent with the manner in which the FFEs review the network adequacy of plans under § 156.230. Commenters stated that States are best informed about local context factors that should be considered in network adequacy standards and reviews such as provider shortages, provider quality, innovative delivery methods, and geographic constraints. Commenters also noted that the proposal has the potential for creating conflicting or duplicative regulations and increasing administrative burden on States and issuers.

Response: For the reasons explained in the proposed rule (88 FR 82587 through 82588), we continue to believe that requiring State Exchanges and SBE–FPs to establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as the FFEs' and conduct reviews of plan compliance with those quantitative network adequacy standards consistent with the manner in which the FFEs review plan network adequacy will create an effective national baseline for network adequacy standards and help provide consumers, regardless of which State they live in, with reasonable, timely access to providers and facilities to manage their health care needs.

We acknowledge commenters' concerns that our network adequacy proposal may create conflicting or duplicative regulations and increase administrative burden on States Exchanges, SBE–FPs, and their issuers. We believe that finalizing these proposals with a modification to require implementation for plan years beginning on or after January 1, 2026, will provide States an opportunity to revise their regulations to ensure there are no conflicting or duplicative regulations. This modification may also lessen the administrative burden of this policy on State Exchanges, SBE–FPs, and their issuers by providing them more time to come into compliance with these new requirements.

In the proposed rule (88 FR 82590), we acknowledged that State-specific factors, such as provider supply shortages, topographic barriers, or other barriers beyond an issuer's control, may necessitate exceptions to these requirements, and this network adequacy policy permits State Exchanges and SBE–FPs to consider those factors as they conduct network adequacy reviews prior to plan certification. Specifically, this final rule extends flexibility to State Exchanges and SBE–FPs to permit issuers that are unable to meet the specified standards to participate in a justification process after submitting their initial data to account for variances, consistent with the processes specified under § 156.230(a)(2)(ii) and (a)(3) and (4). The issuer would include this justification as part of its QHP application and describe how the plan's provider network provides an adequate level of service for enrollees and how the plan's provider network will be strengthened and brought closer to compliance with the network adequacy standards prior to the start of the plan year. State Exchanges and SBE–FPs will be required to review the issuer's justification to determine whether making such health plan available through the Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates as specified under § 156.230(a)(3). In making this determination, the factors State Exchanges and SBE–FPs could consider include local context factors that the commenters reference and may envision, such as whether the exception is reasonable based on circumstances such as the local availability of providers and variables reflected in local patterns of care. If the State Exchange or SBE–FP determines that making such health plan available through its Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates, it could then certify the plan as a QHP.

Comment: Several commenters urged CMS to delay implementation of the proposed network adequacy standards to allow States sufficient time to assess whether their network adequacy standards comply with the proposed requirements or need modification, and for issuers offering QHPs through State Exchanges and SBE–FPs to modify their networks to comply with the new national floor for network adequacy standards.

Response: In the proposed rule, we proposed that the new network adequacy standards that State Exchanges and SBE–FPs must establish and impose would be applicable for plan years beginning on or after January 1, 2025. We understand, however, the desire expressed by some commenters to delay the implementation of this proposal, and we acknowledge that compliance with the network adequacy standards finalized in this rule may require States to review and modify their network adequacy standards and processes. In response to these concerns, CMS is finalizing that the new network adequacy standards for State Exchanges and SBE–FPs will apply to plan years beginning on or after January 1, 2026. In preparation for PY 2026, we will begin communicating and coordinating with State Exchanges and SBE–FPs through the provision of technical assistance. Specifically, during PYs 2024 and 2025, we will work closely with State Exchanges and SBE–FPs on their plans to comply with these network adequacy requirements for plan years beginning on or after January 1, 2026.

Comment: Several commenters requested clarification about whether the proposed network adequacy policies would apply when it is the State Department of Insurance, and not the State Exchange or SBE–FP, conducting the network adequacy reviews.

Response: When establishing a State Exchange or SBE–FP through the Exchange Blueprint approval process under § 155.105, a State must attest to its capacity to ensure QHPs' compliance with market reform rules, applicable regulations, and guidance, as well as its capacity to ensure QHPs' ongoing compliance with QHP certification requirements.[262] As part of this process, a State must inform CMS that network adequacy activities will be completed by the Exchange or an Exchange's designee through contract, agreement, or other arrangement. Regardless of whether a State intends to designate some entity other than the Exchange to perform network adequacy activities, under § 155.1050(a), Exchanges are ultimately responsible for ensuring QHP network adequacy. This proposal does not alter a State's ability to designate an entity other than the Exchange to perform network adequacy reviews, nor does it alter any existing agreements a State Exchange or an SBE–FP may have entered into with State regulatory entities, including State Departments of Insurance, to perform network adequacy reviews or other QHP certification functions. We clarify that the State Exchanges and SBE–FPs may continue current relationships with entities they have designated to undertake QHP certification functions under their approved Exchange Blueprint, including network adequacy reviews, and that all network adequacy reviews, including reviews conducted by an Exchange's designee, must meet the requirements of the network adequacy policies finalized in this rule under new § 155.1050(a)(2).

Comment: Most commenters were supportive of the proposal to make a justification process available for issuers in State Exchanges and SBE–FPs that

[262] Blueprint for Approval of State-Based Health Insurance Exchanges, section III, part C. 4.0. *https://www.cms.gov/cciio/resources/fact-sheets-and-faqs/downloads/cms-blueprint-application.pdf.*

cannot meet the FFEs' time and distance standards and urged CMS to work with State Exchanges and SBE–FPs to closely scrutinize submitted justifications and ensure that issuers' justifications would only be accepted if truly valid.

Response: We appreciate the commenters' feedback. This final rule requires State Exchanges and SBE–FPs to review the issuer's justification to determine whether making such health plan available through the Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates as specified under § 156.230(a)(3). In making this determination, the factors State Exchanges and SBE–FPs could consider include State-specific factors, such as provider supply shortages, topographic barriers, or other barriers beyond an issuer's control. Upon publication of this rule, we will begin communicating and coordinating with State Exchanges and SBE–FPs through technical assistance, in preparation for PY 2026, including on best practices to review and approve or deny issuer-submitted justifications.

Comment: Several commenters opposed the limited exception for SADPs because they believe that SADPs should be held accountable for access to dental providers in the same manner as medical QHPs.

Response: We acknowledge the commenters' concerns. In the 2024 Payment Notice (88 FR 25875), we finalized a limited exception to the provider network requirement for SADP issuers that sell plans in areas where it is prohibitively difficult for the issuer to establish a network of dental providers; this exception is not applicable to medical QHP issuers at this time.[263] Under this exception, an area is considered ''prohibitively difficult'' for an SADP issuer to establish a network of dental providers based on attestations from State Departments of Insurance in States with at least 80% of their counties classified as CEAC, that at least one of the following factors exists in the area of concern: a significant shortage of dental providers, a significant number of dental providers unwilling to contract with Exchange issuers, or significant geographic limitations impacting consumer access to dental providers. We are extending the limited SADP exception to SADP issuers on State Exchanges and SBE–FPs to ensure that consumers residing in all States where it is prohibitively difficult for the issuer to establish a network of dental providers have access to dental plans. As we explained in the 2024 Payment Notice, this limited exception follows logically from how the requirements in sections 1311(c)(1)(B) and (C) of the ACA that plans ensure a sufficient choice of providers apply in the unique SADP context. If creating a network of dental providers is prohibitively difficult for SADPs in certain areas in State Exchange or SBE–FP States, it is foreseeable that there may be some areas where SADPs could not be Exchange-certified, which then risks there being no SADPs in that area and thus no choice of dental providers through SADPs at all. Thus, in this limited context, requiring that SADP issuers in State Exchanges and SBE–FPs establish a dental provider network would defeat the purpose of section 1311(c)(1)(B) and (C) the ACA to ensure that enrollees have a sufficient choice of providers.

Comment: Most commenters supported the availability of an exception process for State Exchanges and SBE–FPs and urged CMS to review these exception requests quickly and to clearly identify the criteria for acceptance.

Response: We appreciate the commenters' support for the exception process. Upon publication of this rule, we will begin communicating and coordinating with State Exchanges and SBE–FPs through technical assistance in preparation for PY 2026. In reviewing exception requests, we will seek to determine whether the State has the requisite statutory, regulatory, and/or sub-regulatory authority to review all QHPs applying for QHP certification in the State for network adequacy as well as the requisite authority to review all QHPs for compliance with time and distance standards using the same specialty lists as detailed in the 2023 Payment Notice (87 FR 27324 through 27326) (set forth at Tables 9 and 10 of this preamble to this final rule).

We will also seek to determine whether the State conducts quantitative reviews of time and distance standards for QHP network adequacy using issuer-submitted data for all plans applying for QHP certification and whether the State's quantitative review of time and distance standards for QHP network adequacy includes parameters that are at least as short as those listed in the 2023 Letter to Issuers [264] for the specialty types listed in Tables 9 and 10 of this preamble to this final rule. Lastly, we will seek to determine whether the State's quantitative review of time and distance standards occurs prior to plan certification and whether the review includes a justification process for plans that do not meet the network adequacy standards.

Before PY 2026, we will also review the information provided by State Exchanges and SBE–FPs to support their exception request. This information may include materials such as guidance documents or templates that describe the State's methodology for reviewing issuer-submitted quantitative data to assess compliance with QHP network adequacy standards, information about the frequency and timeline for network adequacy reviews for QHP issuers in the State, information regarding the State's justification process for issuers not yet meeting the network adequacy standards, and information regarding any compliance review processes the State utilizes to follow up with issuers that complete the justification process.

Comment: Many commenters expressed support for the proposal to require collection of information about which providers offer telehealth services and one commenter recommended that issuers be required to ensure that a percentage of care available in their network is available via telehealth services.

Response: We appreciate the support from these commenters. In the proposed rule, we noted that this proposal is not intended to suggest that telehealth services would be counted in place of in-person service access for the purpose of meeting network adequacy time and distance standards for PY 2025. While we acknowledge the growing importance of telehealth, we want to ensure that telehealth services do not reduce the availability of in-person care. More research would be needed before we could analyze whether counting telehealth is appropriate for purposes of a QHP meeting network adequacy time and distance standards.

Comment: A few commenters expressed opposition to the collection of information about which providers offer telehealth services indicating that the proposed rule underestimated the burden of this proposal, and that the information would not capture the availability of telehealth services.

Response: We believe that the telehealth reporting standards, pursuant to which issuers in State Exchanges and SBE–FPs must indicate whether each network provider offers telehealth services with the options ''Yes,'' ''No,'' or ''Requested information from the provider, awaiting their response,'' would not require extensive administrative time to gather. Approximately half of the parent companies of issuers on the State Exchanges and over two thirds of the

[263] See § 156.230(a)(4).

[264] 2023 Letter to Issuers in the Federally-facilitated Exchanges: *https://www.cms.gov/files/document/2023-draft-letter-issuers-508.pdf.*

parent companies of issuers on SBE–FPs offer Medicare Advantage plans, and Medicare Advantage offers a telehealth credit for network adequacy. Therefore, many more issuers on State Exchanges and SBE–FPs likely already have access to this information. We also believe that QHP issuers that do not currently collect this information may do so using the same means and methods by which they already collect information from their network providers relevant to time and distance standards and provider directories. For these reasons, we estimate that any additional burden resulting from the requirement that QHP issuers report whether each network provider is furnishing telehealth services would be minimal.

We stated in the proposed rule (88 FR 82591, 82638 through 82639) that this data would be for informational purposes, would be intended to help inform the future development of telehealth standards, and would not be displayed to consumers. We believe that the above-described telehealth reporting standards support these objectives by providing State Exchanges and SBE–FPs with a general picture regarding the availability of telehealth services in their State. Additionally, at this time, since this data will not be displayed to consumers, it is not necessary for State Exchanges and SBE–FPs to collect more granular telehealth data from their issuers.

Comment: One commenter recommended delaying collection of telehealth information to allow the development of more efficient ways for issuers to collect that information from providers.

Response: We acknowledge this concern and will require compliance with this network adequacy requirement for plan years beginning on or after January 1, 2026. Upon publication of this rule, we will begin communicating and coordinating with State Exchanges and SBE–FPs through technical assistance in preparation for PY 2026. Notably, we collect the same telehealth information from QHP issuers in the FFEs, and all those issuers have successfully submitted it each plan year.

Comment: Many commenters recommended that CMS extend the FFEs' appointment wait time standards to State Exchanges and SBE–FPs, citing that it would further provide consumers with reasonable, timely access to practitioners and facilities to manage their health care needs. Many commenters also sought information on appointment wait time standards and operations, such as the use of secret shopper surveys to assess compliance with these standards.

Response: As we explained in the proposed rule (88 FR 82591), to reduce burden on State Exchanges and SBE–FPs that are not yet conducting quantitative network adequacy reviews, we did not propose, at this time, that State Exchanges and SBE–FPs enforce appointment wait time standards or that State Exchanges and SBE–FPs ensure that the provider network of each QHP meets applicable standards specified in § 156.230(b) through (e). We will monitor the implementation of these network adequacy standards in State Exchanges and SBE–FPs and consider whether applying the FFEs' appointment wait time standards to issuers in State Exchanges and SBE–FPs in future plan years is warranted. Additional information about appointment wait time standards will appear in the 2025 Letter to Issuers and will only apply to issuers in the FFEs in PY 2025.

We thank commenters for their feedback on these issues and will take their comments into consideration in future rulemaking.

E. 45 CFR Part 156—Health Insurance Issuer Standards Under the Affordable Care Act, Including Standards Related to Exchanges

1. FFE and SBE–FP User Fee Rates for the 2025 Benefit Year (§ 156.50)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82591), for the 2025 benefit year, we proposed to retain the 2024 benefit year FFE user fee rate of 2.2 percent of total monthly premiums and an SBE–FP user fee rate of 1.8 percent of the total monthly premiums.

Section 1311(d)(5)(A) of the ACA permits an Exchange to charge assessments or user fees on participating health insurance issuers as a means of generating funding to support its operations. If a State does not elect to operate an Exchange or does not have an approved Exchange, section 1321(c)(1) of the ACA directs HHS to operate an Exchange within the State. Accordingly, in § 156.50(c), we state that a participating issuer offering a plan through an FFE or SBE–FP must remit a user fee to HHS each month that is equal to the product of the annual user fee rate specified in the annual HHS notice of benefit and payment parameters for FFEs and SBE–FPs for the applicable benefit year and the monthly premium charged by the issuer for each policy where enrollment is through an FFE or SBE–FP. OMB Circular A–25 established Federal policy regarding user fees and what the fees can be used for.[265] OMB Circular A–25 provides that a user fee charge will be assessed against each identifiable recipient of special benefits derived from Federal activities beyond those received by the general public.

a. FFE User Fee Rates for the 2025 Benefit Year

Based on estimated costs, enrollment (including anticipated establishment of SBE–FPs or shifts to State Exchanges in certain States in which FFEs or SBE–FPs currently are operating), and premiums for the 2025 benefit year, we proposed a 2025 user fee rate for all participating FFE issuers of 2.2 percent of total monthly premiums.

Section 156.50(c)(1) provides that, to support the functions of FFEs, an issuer offering a plan through an FFE must remit a user fee to HHS, in the timeframe and manner established by HHS, equal to the product of the monthly user fee rate specified in the annual HHS notice of benefit and payment parameters for the applicable benefit year and the monthly premium charged by the issuer for each policy where enrollment is through an FFE. Issuers seeking to participate in an FFE in the 2025 benefit year will receive two special benefits not available to issuers offering plans in State Exchanges: (1) the certification of their plans as QHPs; and (2) the ability to sell health insurance coverage through an FFE to individuals determined eligible for enrollment in a QHP. For the 2025 benefit year, issuers participating in an FFE will receive special benefits from the following Federal activities:

- Provision of consumer assistance tools;
- Consumer outreach and education;
- Management of a Navigator program;
- Regulation of agents and brokers;
- Eligibility determinations;
- Enrollment processes; and
- Certification processes for QHPs (including ongoing compliance verification, recertification, and decertification).

Activities performed by the Federal Government that do not provide issuers participating in an FFE with a special benefit are not covered by the FFE user fee. We expect that the user fee rates we finalize provide adequate funding for each of the special benefits issuers participating in an FFE receive. For a description of how estimates for costs are developed and a full description of how the proposed 2025 benefit year FFE

[265] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.*

user fee rate was developed see the proposed rule (88 FR 82591 through 82592).

We noted in the proposed rule that if any events significantly changed our estimates around costs, premiums, or enrollment projections between the proposed rule and the final rule, we may modify the FFE and SBE–FP user fee rates that were proposed.

b. SBE–FP User Fee Rates for the 2025 Benefit Year

We proposed to charge issuers offering QHPs through an SBE–FP a user fee rate of 1.8 percent of the monthly premium charged by the issuer for each policy under plans offered through an SBE–FP for the 2025 benefit year.

In § 156.50(c)(2), we specify that an issuer offering a plan through an SBE–FP must remit a user fee to HHS, in the timeframe and manner established by HHS, equal to the product of the monthly user fee rate specified in the annual HHS notice of benefit and payment parameters for the applicable benefit year and the monthly premium charged by the issuer for each policy where enrollment is through an SBE–FP. We expect that the user fee rates we finalize will provide adequate funding for each of the special benefits issuers participating in an SBE–FP will receive. See the proposed rule (88 FR 82592 through 82593) for a full description of how the user fee rate for SBE–FPs is calculated, special benefits to issuers using the SBE–FP, and how the proposed 2025 benefit year SBE–FP user fee rate was developed.

As previously mentioned in this section, we also noted in the proposed rule that if any events significantly change our estimates around costs, premiums, or enrollment projections between the proposed rule and the final rule, we may modify the FFE and SBE–FP rates that were proposed.

We sought comment on the proposed 2025 FFE and SBE–FP user fee rates.

After the proposed rule was published, we revised our enrollment projections as a result of newly available data based on the 2024 Open Enrollment (OE) that occurred between November 2023 and January 2024. In particular, during the 2024 OE cycle, there were more plan selections than expected, which resulted in an increase in our enrollment projections.[266] After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments below, and as a result of our revised enrollment projections, we are finalizing for the 2025 benefit year a user fee rate for all issuers offering QHPs through an FEE of 1.5 percent of the monthly premium charged by the issuer for each policy under plans where enrollment is through an FFE and a user fee rate for all issuers offering QHPs through an SBE–FP of 1.2 percent of the monthly premium charged by the issuer for each policy under plans where enrollment is through an SBE–FP. We note that we establish FFE and SBE–FP user fee rates annually using the latest data and assumptions available at the time to calculate our projections around costs, premiums, and enrollment. Furthermore, FFE and SBE–FP user fee rates in future years will be recalculated using the latest data available at the time, and will take into consideration any changing assumptions, such as any change in the status of the enhanced premium tax credits established by the ARP and extended by the IRA which are currently expected to expire at the end of the 2025 benefit year.

Comment: Several commenters supported our proposal to retain FFE and SBE–FP user fee rates at 2.2 percent and 1.8 percent, respectively, of total monthly premiums for benefit year 2025. Other commenters disagreed with the proposed user fee rates and requested that HHS increase the user fee rates. Several of these commenters requested that HHS increase the user fee rates to improve Exchange functions and requested that HHS increase funding for education and outreach, assisters, and *HealthCare.gov.*

Response: Due to revising our projections between the proposed and final rules based on newly available data, we are finalizing a lower FFE user fee rate at 1.5 of total monthly premiums and a lower SBE–FP user fee rate at 1.2 percent of total monthly premiums for the 2025 benefit year. We revised our enrollment projections based on newly available data as the result of the 2024 OE. During this OE period, there were more plan selections than we projected when calculating the proposed 2025 user fee rates, which resulted in an increase in our enrollment projections. As we discussed in the proposed rule (88 FR 82591 through 82593), we developed the user fee rates based upon estimated costs, enrollment, and premiums. We specifically noted that the user fee rates incorporate our estimates of premium and enrollment changes for the 2025 benefit year and are not solely a reflection of the total expenses estimated to operate and maintain the FFE, Federal platform, and SBE–FP operations. We note that the amount collected under these user fee rates will ensure adequate funding for all user fee eligible Exchange and Federal platform functions.

Accordingly, we are finalizing user fee rates of 1.5 percent of monthly premiums charged by issuers for each policy under plans offered through an FFE and 1.2 percent of monthly premiums charged by issuers for each policy under plans offered through an SBE–FP. We will continue to calculate the FFE and SBE–FP user fee rate annually in a manner that ensures sufficient funding for operations, ensuring that consumers' needs are met and consumer education and outreach, assisters, and *HealthCare.gov* are appropriately funded.

We will also continue to examine cost estimates for the special benefits provided to issuers offering QHPs on the FFEs and SBE–FPs and will continue to establish user fee rates that are reasonable and necessary to fully fund user fee eligible Exchange operation costs.

Comment: A few commenters stated that HHS should adopt a PMPM user fee structure, stating that administrative costs do not track with premium changes and a PMPM user fee would avoid higher fee amounts based solely on premium increases.

Response: We did not propose any changes to the user fee structure; as such, the user fee rates will continue to be set as a percent of the premium. We note that we propose and finalize user fee rates each benefit year and can adjust the user fee rates to avoid higher fee amounts based solely on premium increases. Therefore, should administrative costs not trend with premium changes, we do not believe that such a trend would necessarily justify a PMPM user fee cost structure. Additionally, in accordance with Circular A–25,[267] issuers are charged the user fee in exchange for receiving special benefits beyond those that accrue to the general public. Setting the user fee as a percent of premium ensures that the user fee generally aligns with the business generated by the issuer as a result of participation in an FFE or the Federal platform. However, we will continue to engage with interested parties regarding how the FFE and SBE–FP user fee policies can best support consumer access to affordable, quality health insurance coverage

[266] For additional information, see *https://www.cms.gov/newsroom/fact-sheets/marketplace-2024-open-enrollment-period-report-final-national-snapshot.*

[267] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.*

through the Exchanges that use the Federal platform.

Comment: One commenter appreciated the increased transparency around user fees, and encouraged additional transparency in the methodology used to set the user fee rates, as well as how user fees support HHS' policy goals for the Exchanges. The same commenter recommended greater transparency in how the user fee rates are determined and requested enumerated costs of providing Federal eligibility and enrollment platform service and infrastructure to each State.

Response: We provided additional information in the 2024 Payment Notice proposed rule (87 FR 78272 through 78274) explaining the impact of stable contract cost estimates, the enhanced PTC subsidies in section 9661of the ARP being extended in section 12001 of the IRA through the 2025 benefit year, anticipated effects of the IRA on enrollment, and States transitioning from FFEs or SBE–FPs to State Exchanges, as well as the enrollment impacts of section 1332 State innovation waivers. This methodology was also used to develop the 2025 benefit year FFE and SBE–FP user fee rates. Additionally, we note that while there are certain functions that HHS has historically allocated to individual entities, most costs are not currently mapped to usage by State or individual transaction. User fees cover activities performed by the Federal Government that provide issuers offering a plan in an FFE or SBE–FP with a special benefit. As stated in the proposed rule, these services are generally IT, eligibility, enrollment, and QHP certification services that are more efficiently conducted in a consolidated manner across the Federal platform, rather than by States, so that the services, service delivery, and infrastructure can be the same for all issuers in the FFEs and SBE–FPs. For example, all FFE and SBE–FP issuers send their 834 enrollment transactions to the Federal platform database, which are processed consistently regardless of State. Contracts are acquired to provide services for the Federal platform. The services do not differ by State, and therefore, we do not calculate costs on a State-by-State basis.

2. State Selection of EHB-Benchmark Plans for Plan Years Beginning On or After January 1, 2026 (§ 156.111)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82593), we proposed to revise the standards for the State selection of EHB-benchmark plans at § 156.111 for benefit years beginning on or after January 1, 2027, to: consolidate the options for States to change EHB-benchmark plans at § 156.111(a); revise the scope of benefit requirements at § 156.111(b)(2); and amend § 156.111(e)(3) to require States to submit a formulary drug list as part of its application to change EHB-benchmark plans only if the State is seeking to change its prescription drug EHB. We refer readers to the proposed rule (88 FR 82593) for a discussion of the statutory and regulatory background relating to these proposals.

As we explained in the proposed rule, nine States have changed their EHB-benchmark plans since 2018 by complying with the requirements at § 156.111.[268] We stated in the proposed rule that based on interactions with these States and feedback received in response to the EHB RFI,[269] we understand that certain aspects of the process to change EHB-benchmark plans may impose unanticipated difficulty on and create confusion for States. We stated that we understand there are concerns that the typicality standard, as implemented, is a burdensome way to ensure a State's EHB-benchmark plan selection is equal in scope to a typical employer plan. In addition, we stated that, in limiting EHB-benchmark plan selections, we understand that the generosity standard may also impede the ability of States to select an EHB-benchmark that is equal in scope to the benefits provided under a typical employer plan in the State, which we understand States often find have become more generous over time. We further stated that we understand that requiring States to submit a formulary drug list to HHS as part of the documentation required under § 156.111(e) can be particularly onerous when a State is not seeking to change its prescription drug EHBs. We refer readers to the proposed rule (88 FR 82593 through 82597) for further discussion or our proposals and related rationale.

As a result of that feedback, we proposed changes to § 156.111, as discussed in the following subsections. We also sought comment on the effective date of these changes.

After consideration of comments and for the reasons outlined in our response to comments, we are changing the effective date of the changes we are finalizing to 156.111 (as further discussed in the sections below). Specifically, we are finalizing the proposed revisions to § 156.111 so that they will be effective for benefit years beginning on or after January 1, 2026, rather than benefit years beginning on or after January 1, 2027, as was proposed.

Comment: Many commenters noted that the proposed amendments to § 156.111 would first impact plans for benefit years beginning on or after January 1, 2027, which is later than the proposed effective dates for other amendments to regulations pertaining to the EHB (§§ 155.170(a)(2) and 156.122(a)(3)(i)(E)). Commenters requested aligning the effective dates across these proposals so that the revisions to § 156.111 would become effective at the same time to minimize confusion. Some commenters requested that CMS finalize an earlier effective date than 2027 so that States that are considering submitting applications to change EHB-benchmark plans in 2024, for effectiveness starting with benefit years beginning on or after January 1, 2026, may utilize the proposed flexibilities a year earlier in order to provide consumers with improved EHBs a year earlier.

Response: We are persuaded by commenters that suggested finalizing an earlier effective date for the revisions to § 156.111. We agree with commenters that an earlier effective date may allow States to take advantage of changes to § 156.111 a year earlier, so that consumers may in turn realize improvements to their State's EHB-benchmark plan a year earlier, which we expect to result in improved health outcomes. We had proposed the original January 1, 2027 effective date with the understanding that a later effective date would reduce burden and confusion for States that might be preparing applications for submission on May 1, 2024 that would take effect for benefit years beginning on or after January 1, 2026. We did not want to finalize an effective date that may materially disrupt those applications. However, having reviewed and considered comments, we are now persuaded that an earlier effective date would not cause material disruption to these applications. Indeed, it appears that States interested in submitting applications to change EHB-benchmark plans by May 1, 2024 prefer the finalization of an earlier effective date. We understand that States intending to submit an application by May 1, 2024, have already started that process and have made assumptions based on the policy in current § 156.111. We are

[268] For more information on the changes States have made to their EHB-benchmark plans, see *https://www.cms.gov/CCIIO/Resources/Data-Resources/ehb.*

[269] For example, see *https://www.regulations.gov/comment/CMS-2022-0186-0270; https://www.regulations.gov/comment/CMS-2022-0186-0412;* and *https://www.regulations.gov/comment/CMS-2022-0186-0559.*

sympathetic to these concerns and note that nothing in the revised § 156.111 finalized in this rule prohibits such States from submitting an application by May 1, 2024.

Therefore, we are finalizing the proposed revisions to § 156.111 so that they will be effective for benefit years beginning on or after January 1, 2026. We are otherwise finalizing the revisions to § 156.111 as proposed, as described in the sections that follow.

a. Consolidating the State EHB-Benchmark Plan Options

We proposed to consolidate the choices for States to change their EHB-benchmark plan by revising § 156.111(a) to add a new paragraph (a)(2) which would simply state that, subject to paragraphs (b), (c), (d), and (e) of § 156.111, for plan years beginning on or after January 1, 2027, a State may change its EHB-benchmark plan by selecting a set of benefits that would become the State's EHB-benchmark plan. We stated that the language at current § 156.111(a) would be redesignated as § 156.111(a)(1) and would be revised to provide that this paragraph applies to plan years beginning on or after January 1, 2020 through December 31, 2026. Further, we stated that the language currently at § 156.111(a)(1) through (3) would be redesignated as § 156.111(a)(1)(i) through (iii).

Under 42 CFR 440.347, Medicaid ABPs authorized under section 1937 of the Act are required to meet EHB standards. Similarly, under 42 CFR 600.405, in States that elect to operate a BHP, the standard health plans must meet EHB standards. We explained in the proposed rule that the changes to State EHB-benchmark plan options would also be applicable to States when choosing an EHB-benchmark plan used to define EHBs in a Medicaid ABP or BHP standard health plan.

We sought comment on the proposal to consolidate State EHB-benchmark plan options under § 156.111(a).

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed, though for the reasons described earlier, we are finalizing this change for plan years beginning on or after January 1, 2026, rather than for plan years beginning on or after January 1, 2027, as was proposed. We summarize and respond to public comments received on the proposed consolidation of State EHB-benchmark plan options under § 156.111(a) below.

Comment: Many commenters supported the proposal to consolidate State EHB-benchmark plan update options at § 156.111(a), citing their belief that this simplification would reduce confusion and burden (for example, cost and time) for States seeking to update their EHB-benchmark plans. In turn, commenters also noted that enabling States to more easily and, perhaps therefore more frequently, update their EHB-benchmark plans could result in expanded coverage for, among other things, maternity care, substance use disorder care, obesity care, and chronic disease management. Finally, commenters also suggested that, if States can more easily and frequently update their EHB-benchmark plans as a result, in part, of the proposed consolidation, EHB-benchmark plans may more closely align to currently available typical employer plans, consistent with the statutory linkage between EHB-benchmark plans and typical employer plans.

Response: As noted earlier in this final rule, CMS has previously received feedback from State regulators suggesting that the current EHB-benchmark plan update process can be confusing and burdensome. We proposed to consolidate the options for EHB-benchmark plan updates at § 156.111(a) with this feedback in mind and appreciate commenters' indication that they see this policy as achieving the goals of making the EHB-benchmark plan update process easier to understand and undertake.

Comment: Several commenters opposed the proposal to consolidate State EHB-benchmark plan update options at § 156.111(a). However, commenters opposing the proposed consolidation spoke about their opposition to the proposed changes to the EHB-benchmark plan update process more generally—they did not raise specific concerns regarding consolidation. For example, one opposing commenter stated that the current EHB-benchmark plan update process is working well and strikes an effective balance between ensuring consumers have access to needed coverage, while also allowing States to make updates responsive to the needs of their constituents. Thus, the commenter did not believe the proposed updates, including to § 156.111(a), should be finalized as proposed, but did not identify any specific legal or operational issues that might result from the proposed consolidation.

Response: While we appreciate this feedback, we do not agree that the current EHB-benchmark plan update process is adequately streamlined, given the feedback discussed earlier from States indicating that the current requirements are both difficult to understand and cumbersome to implement.

b. Scope of Benefit Requirements

We proposed to revise the scope of benefit requirements at § 156.111(b)(2) for plan years beginning on or after January 1, 2027, with corresponding proposed revisions to the actuarial requirements at § 156.111(e)(2). Specifically, we proposed at § 156.111(b)(2)(ii) that a State's new EHB-benchmark plan would be required to provide a scope of benefits that is equal to the scope of benefits of a typical employer plan in the State, and that the scope of benefits of a typical employer plan in the State would be defined as any scope of benefits that is as or more generous than the scope of benefits in the State's least generous typical employer plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), and as or less generous than the scope of benefits in the most generous typical employer plan in the State (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), among the typical employer plans currently defined at § 156.111(b)(2)(i)(A) and (B). We proposed to remove the generosity standard currently at § 156.111(b)(2)(ii). We also proposed a technical clarification to the language regarding supplementation at § 156.111(b)(2)(i), which currently states that a State's new EHB-benchmark plan must ''provide a scope of benefits equal to, *or greater than, to the extent any supplementation is required to provide coverage within each EHB category at* § 156.110(a), the scope of benefits provided under a typical employer plan'' (emphasis added), to state that a State's EHB-benchmark plan must provide a scope of benefits equal to the scope of benefits provided under a typical employer plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)).

Under 42 CFR 440.347, Medicaid ABPs authorized under section 1937 of the Act are required to meet EHB standards. Under 42 CFR 600.405, in States that elect to operate a BHP, the standard health plans are required to meet EHB standards. We explained in the proposed rule that the changes to State EHB-benchmark plan requirements would also be applicable to States when choosing an EHB-benchmark plan used to define EHBs in a Medicaid ABP or a BHP standard health plan.

We sought comment on the proposals to revise the typicality standard at § 156.111(b)(2)(i), remove the generosity standard at § 156.111(b)(2)(ii), make corresponding edits to § 156.111(e)(2), and make a technical revision to the language regarding supplementation at § 156.111(b)(2)(i).

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed though, for the reasons described earlier, we are finalizing these changes for plan years beginning on or after January 1, 2026, rather than for plan years beginning on or after January 1, 2027. We summarize and respond to public comments received on these proposals below.

Comment: A majority of commenters supported the proposal to amend the typicality standard at § 156.111(b)(2)(i). These commenters affirmed that moving from a typicality standard under which States must identify a typical employer plan option that exactly matches the value of their proposed EHB-benchmark plan to an approach that sets a lower and upper boundary on the value of a typical employer plan will reduce the time and cost for assessing the value of individual typical employer plan options. Moreover, commenters expressed their belief that a range-based approach to typicality will provide States with additional flexibility to design innovative, responsive EHB-benchmark plans without the artificial constraint of matching with exact precision the value of a specific typical employer plan option.

Commenters indicated that the decreased burden and increased flexibility provided by the updates to the typicality standard will incentivize States to contemplate EHB-benchmark plan updates more frequently to keep pace with both the needs of their consumers and the evolving scope of benefits typically provided by employer plans. Commenters noted this is a particularly desirable outcome, given that only nine States have updated their EHB-benchmark plans to date, and many of those changes have been modest.

Commenters noted that, in light of the reduced costs and time States must allocate to update their EHB-benchmark plan under the proposed change, States may consequently be able to devote more of their attention and energy towards assessing the most optimal package of benefits to provide under their new EHB-benchmark plan, including through more robust public engagement efforts.

Response: We appreciate these commenters' confirmation of our assertion that the revised typicality standard will be conceptually and operationally more straightforward and less burdensome. We share commenters' interest in supporting States to contemplate EHB-benchmark plan updates as often as may be necessary to best meet the needs of their consumers, without needing to satisfy unnecessary or excessively burdensome typicality requirements.

Comment: A few commenters opposed the proposed updates to the typicality standard under at § 156.111(b)(2)(i). Commenters indicated their concern that the proposed changes could threaten the connection between the statutory requirements for typicality set forth by the ACA and the regulatory framework implementing these requirements. Commenters also expressed that a more flexible approach to typicality could expose the Federal Government to increased costs to the extent EHB-benchmark plans are more frequently updated with additional benefits. Commenters noted that such changes would necessitate greater Federal outlays in the form of additional Federal expenditure on subsidization of plan premiums through APTCs.

Response: We do not agree that the adjustments proposed to the typicality standard would erode the implementation of the ACA typicality requirement in the EHB-benchmark plan update process. We believe that the new typicality standards will strike an appropriate balance between easing State burden and ensuring that the scope of benefits considered EHB stays closely aligned to the scope of benefits typically provided by employers. Specifically, the typicality standard has previously required that States identify a single typical employer plan option offering an equivalent scope of benefits to the scope of the proposed EHB-benchmark plan, which has required States to: (1) analyze many typical employer plan benefit offerings until a match is identified (which could require both significant time and cost to the State), and/or (2) require States to offer a set of benefits as EHB that they believe is not as well suited to the needs of their population in order to achieve an exact scope of benefits that matches the scope of benefits offered by one specific typical employer plan, rather than, for example, selecting an EHB-benchmark plan that offers a scope of benefits that is greater than that offered by one typical employer plan, but not as great as the next-most-generous typical employer plan. Under the amended typicality standard, States may need to only assess the value of two typical employer plans: the least generous and the most generous. This means that States can avoid additional time and cost for actuarial assessment. And, once States have identified the least and most generous typical employer plan options, they then have the flexibility to select an EHB-benchmark plan with a scope of benefits that falls anywhere along the continuum between the scope of the least and most generous plans. Further, we reiterate that the revised typicality standard maintains both a floor *and* a ceiling on the generosity of benefits considered EHB, which serves to ensure States can, at most, increase the scope of benefits provided by their EHB-benchmark plan to match, or be more generous than, to the extent supplementation is required to provide coverage within each EHB category at § 156.110(a), the scope of benefits provided by the most generous typical employer plan. As such, Federal expenditures in the form of APTC are constrained to increase, at most, only as much as typical employer plans are also increasingly generous over time, which has always been the case under the typicality standard at § 156.111.

Comment: A majority of commenters also supported the removal of the generosity standard at § 156.111(b)(2)(ii), explaining that removing the generosity standard will make the EHB-benchmark plan update process easier to understand, less burdensome to execute, and more adaptable to the needs of each State's population. Commenters also explained that the elimination of the generosity standard will ensure that States can better incorporate in EHB-benchmark plans any changes to the scope of benefits in typical employer plans since 2017.

Commenters noted that, with the updates to the typicality standard and the elimination of the generosity standard, the scope of benefits provided by the most generous typical employer plan can now reflect the scope of benefits provided by the most generous large group typical employer plan. Commenters indicated that large group plans are more generous than the other plan options available for use in a State's typicality analysis, such that the updates to these policies taken together will provide States the opportunity to provide a potentially more generous package of EHB through their EHB-benchmark plan than they could previously.

Commenters suggested that by eliminating the generosity standard, States can better incorporate benefits

that consider the health care needs of diverse segments of the population as EHB. Commenters note this is of particular importance given the evolution of new approaches to address gaps in care for members of marginalized communities and those who have traditionally experienced inequitable health outcomes.

Several commenters opposed the proposed removal of the generosity standard at § 156.111(b)(2)(ii). These commenters suggested that removing the generosity standard could allow the scope of benefits in EHB-benchmark plans to outpace the scope of benefits provided by typical employer plans. Further, some commenters asserted, without the generosity standard, there would be no constraints on how generous a State could elect to make its EHB-benchmark plan and allow a State to manipulate the EHB-selection process to impermissibly expand the scope of benefits beyond what the ACA intended. Specifically, a few commenters expressed concern that, in conjunction with the proposed change at § 155.170 with regard to State-mandated benefits included in the EHB-benchmark plan, removing any constraint on EHB-benchmark plan generosity would enable States to subvert the requirement to defray the costs of mandated benefits, simply by adding all existing and future mandated benefits to their benchmark plan. Commenters expressed concerns about coverage becoming potentially unaffordable for consumers and costly for the Federal Government, in the form of increased APTCs.

Response: In the proposed rule (88 FR 82596), we acknowledged that the proposed removal of the generosity standard would also establish an upper bound for State EHB-benchmark plan selections that better tracks with the scope of benefits in typical employer plans as they change over time. We agree with commenters that larger group plans tend to be more representative of typical employer plans as they change over time, especially given that since small group health plans are required to provide the EHB, it may be less appropriate to rely on the scope of benefits in small group plans to assess the benefits typically provided in employer plans. Evidence also suggests that the generosity of larger group employer plans has moderately increased since the passage of the ACA. We also believe that, in conjunction with the more flexible range-based approach to typicality, a higher available upper bound for EHB-benchmark plan generosity will allow States greater flexibility to ensure EHB-benchmark plans reflect evolving standards of care and are well-positioned to address long-standing health disparities.

We disagree with commenters' assertion that removing the generosity standard will jeopardize the connection between the EHB-benchmark plan update process and the ACA's typicality requirement. The typicality standard, which this rule amends but does not eliminate, ensures that EHB-benchmark plans cannot offer a scope of benefits that is more generous than the scope of benefits provided by the most generous typical employer plan available for comparison, except to the extent supplementation is required to provide coverage within each EHB category at § 156.110(a). As such, we believe that commenters' concern about affordability are largely disproportionate to the meaningful but modest increases the proposed changes represent to the range of plan generosity available to States when seeking to update their EHB-benchmark plans.

Nevertheless, we understand commenters' concerns that the amendments to §§ 155.170 and 156.111 could technically allow States to game the scope of benefits of the available typical employer plans in the State by mandating the coverage of benefits in large group market plans in the State. While we recognize this as a technical possibility available to States, we are not concerned that will in occur in practice. Based on our experience working with States and their selection of EHB, we understand that States are already motivated to minimize the cost impacts of additional benefit coverage in all markets, and thus do not believe it likely that States would impose benefit mandates on their large group markets solely to manipulate the typical employer plans available for comparison when seeking to change their EHB-benchmark plan. For those States that do enact benefit mandates on large group markets, our expectation is that States do so in order to improve the coverage of benefits in such plans to accommodate changes in medical evidence and scientific advancement, and not to specifically subvert Federal guidelines for changing EHB-benchmark plans. This is especially the case given that, in our experience, State legislatures typically enact mandated benefits on large group market plans with little consideration for their impact on EHB. In any event, commenters did not provide any insight on how one might distinguish between a State mandate on large group market plans designed to improve coverage in such plans and a mandate designed to allow the State to game the scope of benefits of the available typical employer plans in the State.

We believe that States understand that it is implicit that applications must be submitted in good faith, and that States may not submit applications in good faith if a State mandates the coverage of specific benefits in large group market plans with the specific intent to manipulate the scope of benefits of the available typical employer plans. We are likely to suspect that a State may be gaming its typical employer plans if it enacts a mandate for the coverage of specific benefits in large group market plans and soon thereafter seeks to add similar benefits to its EHB-benchmark plan by utilizing a large group market plan that is impacted by the State's mandate as the most generous typical employer plan. We caution States that attempt to update EHB-benchmark plans in this manner that, pursuant to § 156.111(b)(2)(ii)(B)(1) and (4) as finalized in this rule, a large group typical employer plan must, among other things, belong to a product that has at least 10 percent of the total enrollment of the five largest large group health insurance products in the State and be from a plan year beginning after December 31, 2013. We interpret that these provisions work together to mean that, while a State can select a recent large group market plan as a typical employer plan, enough time must pass between the effective date of the coverage of all large group market plans in the State for the State to make a determination that the selected plan's product has at least 10 percent of total enrollment of the five largest large group health insurance products in the State. This means a State cannot select a large group plan with an effective date that begins in the first months of the year that the State submits an application to change EHB-benchmark in May. Thus, from a timing perspective, States are not able to select a large group typical employer plan that is effective in the same year or that may be effective in a year following the year the State submits an EHB-benchmark plan application. Given this operational constraint, at this time, we do not believe it is necessary to propose a cooldown period that would prevent a State from using a large group market plan that is impacted by a State's recent benefit mandate as the most generous typical employer plan, but will consider such a cooldown period for potential future rulemaking if necessary. In addition, we clarify the interaction between the amendments to § 156.111 and the amendment to § 156.122 that

codifies that prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB. As explained in the proposed rule and in the preamble of this final rule addressing § 156.122, when the amendment to § 155.170 is read in conjunction with the proposed amendment to § 156.122, any prescription drug that an issuer covers in excess of the State's EHB-benchmark plan is EHB *unless* there is a State mandate requiring such coverage. Accordingly, a State that mandates the coverage of prescription drugs in excess of a State's EHB-benchmark plan cannot consider coverage of the excess drugs as EHB for purposes of completing the actuarial analyses required under § 156.111(e).

Comment: One commenter asserted that any changes to a State's EHB-benchmark plan should also apply to the process by which a State selects a benchmark plan used to determine EHBs in a Medicaid ABP or a standard health plan in the BHP.

Response: In accordance with implementing Medicaid regulations found at 42 CFR 440.347, ABPs must contain EHB coverage in accordance with the requirements set forth at 45 CFR part 156. Similarly, BHP regulations at 42 CFR 600.405, require standard health plan coverage to include, at a minimum, EHB as described under §§ 156.110 and 156.122 regarding prescription drugs. Therefore, the amendments to § 156.111 will impact how States define EHBs that apply to the ABPs and the BHP, as we explained in the proposed rule.

c. Drug Formularies

We proposed to revise § 156.111(e)(3) to require States to submit a formulary drug list as part of their documentation provided to change EHB-benchmark plans only if the State is seeking to change its prescription drug EHB. Currently, we require States to submit a formulary drug list if the State is selecting its EHB-benchmark plan using the option at current § 156.111(a)(3), even if the State is not seeking to change its prescription drug EHB. We stated in the proposed rule that we understand that creation and submission of this formulary drug list creates a significant amount of burden for the State. Since we can carry over the State's existing prescription drug EHB, as defined under § 156.122, without substantial input from the State if the State is not seeking to change its prescription drug EHB, we proposed to revise § 156.111(e)(3) as specified to reduce the burden on States.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision as proposed though, for the reasons described earlier, we are finalizing this change for plan years beginning on or after January 1, 2026, rather than for plan years beginning on or after January 1, 2027, as was proposed. We summarize and respond to public comments received on this proposal below.

Comment: Several commenters supported the proposal to require States to submit formulary drug lists as part of an EHB-benchmark plan update application only if the State is seeking to adjust its prescription drug EHB. Commenters indicated that requiring such submission even in the absence of any intended prescription drug EHB changes was unnecessarily burdensome and created an additional hurdle for States seeking to update their EHB-benchmark plans. Conversely, commenters suggested that removing this requirement except in cases where States are seeking to change their prescription drug EHB would facilitate easier and more frequent EHB-benchmark plan updates.

Response: We agree with commenters' assessment that requiring a formulary drug list even in cases where States are not seeking to change their prescription drug EHB is unnecessary, and a poor use of a State's resources. We also agree that reducing the barriers for States seeking to update their EHB-benchmark plans, in this way and others, may enable States to take up more frequent EHB-benchmark plan updates.

Comment: A few commenters opposed the proposal to require formulary drug lists only in cases where States seek to change their prescription drug EHB. However, these commenters did not articulate a specific objection to this proposal. Rather, for example, some of these commenters more generally asked that CMS retain the prior policy while also seeking to provide detailed assistance to support States as they endeavor to update their EHB-benchmark plans.

Response: We continue to believe, as was affirmed by supporting commenters, that requiring States to submit a formulary drug list even when they do not seek changes to their prescription drug EHB creates burdens that can be removed without negative impact to the comprehensiveness of an EHB-benchmark plan application. As such, we believe that removing this requirement will reduce the cost and time needed for States to apply to update their EHB-benchmark plans while maintaining rigorous standards for the quality of such applications.

3. Provision of EHB (§ 156.115)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82597), we proposed to remove the regulatory prohibition at § 156.115(d) on issuers from including routine non-pediatric dental services as an EHB.

In the EHB Rule, we finalized at § 156.115(d) that issuers of a plan offering EHB may not include, among other services and benefits, routine non-pediatric dental services as an EHB, even if the State's current EHB-benchmark plan includes such services as covered benefits. Section 1302(b)(2) of the ACA directs the Secretary, in defining the EHB, to ensure that they are equal in scope to the benefits provided under a typical employer plan. In the proposed EHB Rule (77 FR 70644), in support of the prohibition at § 156.115(d), we stated that routine non-pediatric dental services are not typically included in the medical plans offered by employers and are often provided as excepted benefits by the employer. In the proposed rule, we explained that we now believe a more natural reading of Section 1302(b)(2) of the ACA is one that considers all the benefits typically covered by employers. This means EHB should be equal in scope to the benefits provided under a typical employer plan, regardless of whether such benefit is historically considered a non-excepted ''health benefit'' or whether such benefit is ''typically covered'' by an employer's major medical plan. Given that oral health has a significant impact on overall health and quality of life,[270] and several commenters on the EHB RFI[271] advocated for non-pediatric dental EHB coverage, we proposed specifically to remove the regulatory prohibition on issuers from including routine non-pediatric dental services as an EHB. We sought comment on whether similar changes should be proposed with regard to routine non-pediatric eye exam services and long-term/custodial nursing home care benefits as well.

In the proposed rule, we stated it appears that routine non-pediatric dental services are commonly covered

[270] Spanemberg, J.C., Cardoso, J.A., Slob, E.M.G.B, & López-López, J. (2019). Quality of life related to oral health and its impact in adults. *Journal of Stomatology, Oral and Maxillofacial Surgery, 120*(3), 234–239. *https://doi.org/10.1016/j.jormas.2019.02.004.*

[271] For example, see *https://www.regulations.gov/comment/CMS-2022-0186-0567; https://www.regulations.gov/comment/CMS-2022-0186-0586;* and *https://www.regulations.gov/comment/CMS-2022-0186-0626.*

as an employer-sponsored or other job-based benefit to a degree that warrants removing the prohibition on their provision as an EHB. We cited various sources to support this assertion, including KFF's 2019 Employer Health Benefits Survey results, which indicated that among firms offering health benefits in 2019, 59 percent of small firms (3–199 workers) and 92 percent of large firms (200 or more workers) offered a dental insurance program to their workers separate from the health plan(s).[272] We solicited comment on this understanding of the inclusion of routine non-pediatric dental services in employer-sponsored or other job-based benefits.[273] Additionally, we stated that we believe prohibiting the inclusion of routine non-pediatric dental services as an EHB on the basis that they are not often covered by typical employer plans is a more restrictive reading of section 1302(b)(2) of the ACA than is warranted by a plain reading of the statute. Section 1302(b)(2) of the ACA states that, in defining the EHB, the Secretary shall ensure that the scope of the EHB is equal to the scope of benefits provided under a typical employer plan, as determined by the Secretary and as informed by a survey by the Secretary of Labor of employer-sponsored or other job-based coverage to determine the benefits typically covered by employers. We explained that in considering the benefits typically covered by employers, this statutory section does not require the Secretary to consider only those benefits provided in major medical plans. We further stated that it also does not require the Secretary to consider only those benefits that are strictly ''health benefits,'' if such a term excludes coverage of routine non-pediatric dental services. Therefore, we stated that we no longer believe the prohibition on non-pediatric dental services as an EHB is warranted. Accordingly, we proposed to remove the regulatory prohibition on including routine non-pediatric dental services as an EHB at § 156.115(d).

We explained in the proposed rule that removing the prohibition on issuers from including routine non-pediatric dental services as an EHB would remove regulatory and coverage barriers to expanding access to routine non-pediatric dental benefits for those plans that must cover EHB. We further stated that this would allow States to work to improve adult oral health and overall health outcomes, which are disproportionately low among marginalized communities such as people of color and people with low incomes.[274] We refer readers to the proposed rule (88 FR 82597 through 82598) for further discussion of the impact of oral health on overall health and quality of life.

We explained in the proposed rule that this proposed policy would also align with CMS' Oral Health Cross Cutting Initiative, which aims to implement policy changes and consider opportunities through existing authorities to expand access to oral health coverage.[275] Additionally, we stated that it would align with the request of several commenters on the EHB RFI (87 FR 74097) for us to remove regulatory and coverage barriers to expanding access to routine non-pediatric dental care.

In the proposed rule, we emphasized that the removal of this prohibition would not, by itself, mean that routine non-pediatric dental services would be an EHB, even in States with an EHB-benchmark plan that currently describes routine non-pediatric dental services as a non-EHB covered benefit. We stressed that this proposal would not require any State to add such services as an EHB, nor would we consider any existing language regarding routine non-pediatric dental services in any State's current EHB-benchmark plan to have the effect of adding such services as an EHB. We stated that under this proposal, a State seeking to provide any routine non-pediatric dental services as an EHB would be required to update its EHB-benchmark plan to include such services as an EHB pursuant to § 156.111. We explained that if a State does not update its EHB-benchmark plan to add coverage of routine non-pediatric dental services as an EHB, then such services would not be an EHB, even if the current EHB-benchmark plan document includes routine non-pediatric dental services.

We explained in the proposed rule that under this proposal, we would expect States, in determining whether it is appropriate to update their EHB-benchmark plan to add routine non-pediatric dental services as an EHB, to weigh the advantages of expanded dental services against the challenges of providing such services. We refer readers to the proposed rule (88 FR 82598) for further discussion.

We noted that while section 1302(b)(4)(F) of the ACA permits a medical QHP sold on the Exchange to omit coverage of pediatric dental EHB services if a SADP is offered through an Exchange,[276] there is no statutory basis to extend this exception to routine non-pediatric dental services. Thus, we stated that plans subject to an EHB-benchmark plan that includes routine non-pediatric dental services as an EHB may not omit such coverage on the basis that a SADP already provides such coverage through an Exchange.

We explained that this proposal, if finalized, may impact plans that are not directly subject to the EHB requirements, such as self-insured group health plans and fully-insured group health plans in the large group market, that are required to comply with the annual limitation on cost sharing and restrictions on annual or lifetime dollar limits in accordance with applicable regulations with respect to such EHBs.[277] We further explained that if a State updates its EHB-benchmark plan to add coverage of routine non-pediatric dental services as an EHB and the sponsor of a self-insured group health plan or fully-insured group health plan in the large group market selects that EHB-benchmark plan, any routine non-pediatric dental services covered by such a group health plan would generally be subject to the limitation on cost sharing and restrictions on annual or lifetime dollar limits. However, we stated that if the sponsors of such plans offer coverage of routine non-pediatric dental services through an excepted benefit under 26 CFR 54.9831–1(c)(3), 29 CFR 2590.732(c)(3), and 45 CFR 146.145(b)(3), including a limited-scope dental plan, that benefit is generally excepted from complying with the group market reforms, including the limitation on cost sharing and restrictions on annual or lifetime dollar limits.

Additionally, under 42 CFR 440.347, Medicaid ABPs authorized under section 1937 of the Act are required to

[272] KFF (2019, September 25). *2019 Employer Health Benefits Survey. https://www.kff.org/report-section/ehbs-2019-section-2-health-benefits-offer-rates/#figure217.*

[273] Section 156.115(d) also currently prohibits routine non-pediatric eye exam services, long-term/custodial nursing home care benefits, and non-medically necessary orthodontia as EHB. We did not propose to remove the prohibition on including such services as EHB in the proposed rule; however, we solicited comment on the extent to which employer-sponsored or other job-based benefits provide coverage for these services.

[274] Northridge, M.E., Kumar, A., & Kaur, R. (2020). Disparities in Access to Oral Health Care. *Annual review of public health, 41,* 513–535. *https://doi.org/10.1146/annurev-publhealth-040119-094318.*

[275] CMS. (n.d.) *Strategic Plan Cross-Cutting Initiatives. https://www.cms.gov/files/document/strategic-plan-overview-fact-sheet.pdf.*

[276] See section 1311(d)(2)(B)(ii) of the ACA for more information on offering SADP benefits.

[277] See parallel requirements to § 147.126 at 26 CFR 54.9815–2711, and 29 CFR 2590.715–2711. Additionally, section 2707(b) of the PHS Act, as added by the ACA, was incorporated by reference into section 9815 of the Internal Revenue Code and section 715 of ERISA.

meet EHB standards. Under 42 CFR 600.405, in States that elect to operate a BHP, the standard health plans are required to meet EHB standards. We explained that under this proposal, States would be permitted to include routine non-pediatric dental services as EHB for purposes of their ABPs or BHP standard health plans.

We sought comment on the proposal to revise § 156.115(d) to remove the regulatory prohibition on issuers from including routine non-pediatric dental services as an EHB, and whether other impacts should be considered, including the impact this proposal would have, if finalized, on health insurance coverage in the individual, small group, and large group markets, as well as self-insured plans.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision, as proposed, to remove the regulatory prohibition at § 156.115(d) on issuers from including routine non-pediatric dental services as an EHB. We also finalize that the changes at § 156.115(d) will be effective beginning with PY 2027. Pursuant to this effective date, if a State wants to add a routine non-pediatric dental benefit to its EHB-benchmark plan, the earliest it can do so is with the calendar year 2025 submission cycle, for applications due to CMS on or before May 7, 2025. Therefore, if CMS approves the application, then the changes would be effective in the State for plan years beginning on or after January 1, 2027. Further, we acknowledge that the annual limitation on cost-sharing for Exchange-certified stand-alone dental plans (SADPs), which is updated and published annually in the Letter to Issuers, is applicable to only to those services that are EHB and only to SADPs. We summarize and respond to public comments received on the proposed policy below.

Comment: A majority of commenters supported this proposal. Many of these commenters supported the proposal in part because of the important role oral health plays in overall health and/or quality of life. In particular, several commenters noted the important impact oral health has on chronic conditions including but not limited to diabetes, HIV/AIDS, and cancer. Several commenters also mentioned the importance of preventive care. A few commenters mentioned the connection between oral health and mental health. A few commenters also mentioned the importance of treating the ''whole member.''

Response: We strongly agree with the commenters that oral health has a significant impact on overall health and quality of life.[278] We prioritize the development and implementation of policies that promote the health and wellbeing of enrollees and will continue to direct our efforts towards improving overall health and quality of life. We also agree with commenters that it is crucial to treat the ''whole member,'' highlighting the importance of whole person health [279] and the need for medical-dental integration.[280] We also recognize the importance of preventive oral health care, the connection between oral health and chronic disease management, and the connection between oral health and mental health.

Comment: Many commenters supported this proposal because of its potential to improve oral health disparities and further health equity. More specifically, several commenters discussed the potential for improving low-income/economic disparities, rural disparities, racial disparities, and maternal health. On the other hand, one commenter disagreed that this proposal will lead to equitable access because of anticipated poor uptake by States.

Response: We strongly agree with the commenters who stated that this proposed policy has the potential to improve oral health disparities and achieve health equity. As we stated in the proposed rule (88 FR 82598), this amendment allows States greater flexibility to add benefits to improve non-pediatric oral health and overall health outcomes, which are disproportionately low among marginalized communities such as people of color and people with low incomes. Therefore, this policy will promote health equity by addressing non-pediatric oral health disparities and improving the health outcomes of vulnerable populations. We also agree with the specific oral health disparities that commenters highlighted—pertaining to economic disparities, rural disparities, racial disparities, and maternal health—which this policy can help address. We disagree with the comment that this policy will not lead to equitable access because of poor uptake by States, particularly in light of the other proposals finalized in this rule to alleviate State burden in assessing the defrayal of State-mandated benefits and to change EHB-benchmark plans. Additionally, given the feedback we have received from States and relevant stakeholders on the EHB RFI and proposed 2025 Payment Notice, we believe States will add routine non-pediatric dental benefits as an EHB, and this will help reduce oral health disparities and improve health equity within these States' populations. This final policy provides States the option to add coverage of non-pediatric dental benefits as EHB and removes a barrier to this coverage that previously existed.

Comment: A few commenters requested to delay the finalization of this policy and requested the effective date be no sooner than PY 2027.

Response: We did not directly specify an effective date for this policy in the proposed rule; therefore, by default these changes would have become effective 60 days after the publication of the final rule in the **Federal Register**. We sought comment on the impact of this policy, acknowledging that issuers would need sufficient lead time in order to successfully operationalize it, and sought comment on whether other impacts should be considered. We acknowledged this policy is a departure from the prior policy and that issuers in States that choose to update their EHB-benchmark plan to include non-pediatric dental services may need to establish new networks of dental providers and address other operational needs to implement this change. Taking into consideration the comments received, we are finalizing that the changes at § 156.115(d) will be effective beginning with PY 2027. Pursuant to this effective date, a State seeking to add routine non-pediatric dental in PY 2027 would need to submit an EHB-benchmark plan application under § 156.111 by the EHB-benchmark plan update deadline of May 7, 2025, which would then be effective in the State for plan years beginning on or after January 1, 2027. We are finalizing this date with a change in the regulation text to account for this effective date.

We do not believe further delay of these changes is necessary. In PY 2024, approximately 9.9 percent of QHPs on the FFEs included coverage for some degree of routine non-pediatric dental services as non-EHB; thus, it is not unprecedented for health plans, including QHPs, to cover routine non-pediatric dental services as non-EHB. Accordingly, we expect that this experience will mitigate any operational challenges that States may face when adding such services as EHB.

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[278] Spanemberg, J.C., Cardoso, J.A., Slob, E.M.G.B, & López-López, J. (2019). Quality of life related to oral health and its impact in adults. *Journal of Stomatology, Oral and Maxillofacial Surgery, 120*(3), 234–239. *https://doi.org/10.1016/j.jormas.2019.02.004.*

[279] *https://www.nccih.nih.gov/health/whole-person-health-what-you-need-to-know.*

[280] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6618181/.*

Further, State EHB-benchmark applications are due approximately 18 months before any change in EHB would be realized in plans. Before these applications are due, States have typically devoted several months or years interacting with interested parties in the State to understand what changes should be made to the EHB-benchmark plans, and what the impact of those changes would be. Thus, we expect ample time for issuers to operationalize the provision of routine non-pediatric dental services as EHB. Given that the finalization of this amendment would only begin to impact coverage beginning on January 1, 2027 in those States that might submit EHB-benchmark plan applications during the calendar year 2025 cycle, there will be sufficient lead time to allow issuers to build the infrastructure necessary to administer the routine non-pediatric dental benefits that States add as EHB. If a State is considering adding routine non-pediatric dental benefits as an EHB but believes it would be beneficial to take more time to assess the potential cost, operational, and other implications of the policy for their State, the State can wait to add this benefit to their EHB-benchmark plan until it is ready to do so.

Comment: The majority of commenters agreed with our reinterpretation in the proposed rule of the typical employer plan provision at section 1302(b)(2) of the ACA as one that considers all the benefits typically covered by employers, regardless of whether such benefit is historically considered a ''health benefit'' or whether such benefit is ''typically covered'' by an employer's major medical plan or, for example, by a limited scope excepted benefits plan. As justification for their support of this reinterpretation, these commenters explained that the statutory text requires HHS to consider the benefits typically covered by employers in employer-sponsored coverage, without specifying whether that coverage is limited to the coverage provided in major medical plans. As a result, these commenters agreed that the previous interpretation was overly restrictive and unnecessarily denied access to basic and necessary services as EHB.

However, several commenters disagreed with HHS's reinterpretation of this provision. These commenters asserted that the statutory text limits the EHB to those provided under a singular typical employer plan, and not all of the benefits provided by an employer under a combination of plans. Some of these commenters asserted that the ACA specifically excludes routine non-pediatric dental services, routine non-pediatric eye exam services, and long-term/custodial nursing home care benefits from consideration as EHB. In these commenters' view, HHS's reinterpretation would impermissibly allow for the inclusion of any employer benefit as EHB, including employee assistance programs, short-term disability, critical illness, group life, legal assistance, and 401(k) benefits. These commenters also explained that, except for pediatric oral and vision services, all of the EHB categories explicitly mentioned in statute refer to benefits that have historically been considered ''health benefits'' that are typically covered under major medical plans and not excepted benefit plans. One commenter asserted that HHS's reinterpretation would undermine statutory intent that the EHB be ''essential benefits'', as it would include benefits that employers do not deem necessary to include in their major medical plan, but instead offer as a ''voluntary add-on'' for those employees who may desire them. Additionally, some commenters asserted that the majority of employers actively decide to provide routine dental services through a standalone dental plan rather than through a major medical plan.

Response: The ACA does not exclude routine non-pediatric dental services, routine non-pediatric eye exam services, and long-term/custodial nursing home care benefits from consideration as EHB; only the existing regulation at § 156.115(d), which this final rule now amends to remove the exclusion of routine non-pediatric dental services, prohibits health plans from covering such services as EHB. The statutory term ''a typical employer plan'' is ambiguous with regard to whether it references a single major medical plan, or the entire suite of benefits provided by the employer, and our updated interpretation is supported by the statutory directive for HHS to conduct a survey of employer-sponsored coverage to determine the benefits typically covered by employers without distinguishing whether this coverage is provided through one or more plans. Given this ambiguity, we do not agree with comments that the statutory text must be read to exclude coverage typically provided by employers through plans that are offered in addition to major medical coverage.

We disagree with commenters that employer-sponsored dental benefits cannot be considered an EHB simply because of the manner of the contractual arrangements by which employers provide benefits to their employees. The impact of routine dental care on overall health and quality of life is not in question, nor is the fact that employers clearly view dental benefits as an essential part of the entire set of health benefits they provide for employees, given how many employers provide dental benefits to their employees.[281] That employers happen to provide those dental benefits through a separate contractual agreement seems a tenuous justification for prohibiting States from allowing adults to access as EHB something that can be as basic and impactful to overall health as routine dental care.

Further, we disagree with those commenters that claimed that employers have a choice whether to provide routine dental services through their major medical plan or through a standalone dental plan. We understand that, in many cases, the benefits that employers may select to cover for employees is contingent on the decisions made by health insurance companies on what benefits they want to make available for the employer's selection.

We are not persuaded by commenters that insist the intent of the statute requires HHS to define the EHB in accordance with ''benefits that have historically been considered a health benefit.'' Many of the core tenets that support our modern understanding of health insurance as providing coverage of items and services are less than a hundred years old, and there is no universally understood set of essential items and services; even the ACA's statutory text recognizes that HHS's definition of the EHB need not be limited to the enumerated categories of EHB (''. . . the Secretary shall define the essential health benefits, except that such benefits shall include *at least* the following general categories and the items and services covered within the categories . . .'' (emphasis added)).

The availability of benefits in health plans is always evolving. As a very limited example, consider that the very first health plans in the 1920s and 1930s only provided coverage for hospitalization, and coverage for professional services began later in the 1930s.[282] Psychiatric care first began to

[281] As these commenters pointed out, 91 percent of employers offer dental coverage that is separate from the coverage provided through their health plans. Source: Gary Claxton, Matthew Rae, Aubrey Winger, and Emma Wager, Employer Health Benefits: 2023, Kaiser Family Foundation, 2023, page 55 (*https://files.kff.org/attachment/Employer-Health-Benefits-Survey-2023-Annual-Survey.pdf*).

[282] Institute of Medicine (US) Committee on Employment-Based Health Benefits; Field MJ, Shapiro HT, editors. Employment and Health Benefits: A Connection at Risk. Washington (DC):

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be covered following World War II.[283] Then, the first efforts to create parity between health benefits and mental health benefits began during President John F. Kennedy's administration with the requirement of the Federal Employees Health Benefits Program (FEHBP) to cover psychiatric illnesses at a level equivalent to general medical care.[284] Benefits for the elderly, retired people, and those with disabilities or low-income became available through Medicare and Medicaid in the 1960s. Coverage for treatment of substance use disorders rose to prominence in the 1970s and 1980s. Medicare began covering hospice care in the early 1980s, the Emergency Medical Treatment and Active Labor Act (EMTALA) was passed in 1986, and Medicare Parts C and D were introduced in the early 2000s before the ACA was passed in 2010.[285] These are just some of the examples of how benefits have expanded over the years, especially when such expansions have accounted for changes in medical evidence or scientific advancement. We therefore disagree with commenters' statement that there exists a set of ''benefits that have historically been considered a health benefit'' and disagree with commenters' concerns that it is unreasonable or unprecedented to now include routine non-pediatric dental care in this evolution.

Regardless of how one interprets statutory text, one intent of the ACA with regard to the EHB is clear—that enrollees should have access to a minimum set of benefits that take into account the health care needs of diverse segments of the population.[286] Given that routine dental services consist of relatively basic items and services rendered by licensed dentists and allied health professionals to improve the health of an individual, it is reasonable for a State to determine that the provision of such benefits among this minimum set of benefits as EHB is necessary to accommodate the health care needs of its population.

We also note that commenters opposing the policy made no argument regarding the treatment of *non*-routine non-pediatric dental care, such as treatment for natural teeth or dental prostheses as a result of an injury, which are not currently prohibited as EHB by § 156.115(d). Such non-routine dental benefits have long been included as EHB, given that they are among the covered benefits described in the vast majority of EHB-benchmark plans. Thus, it is hardly unprecedented for at least some non-pediatric dental benefits to be covered as EHB by health insurance plans.

Comment: One commenter explained that HHS's reinterpretation of the typical employer plan provision conflicts with the typicality standard at § 156.111(b)(2) that limits the plans available for the typicality analysis to major medical plans. This commenter also asserted that the proposal failed to grapple with the reliance interests engendered by the interpretation that the ''typical employer plan'' is a major medical plan.

Response: In the 2019 Payment Notice, we added § 156.111 to give States additional options for changing EHB-benchmark plans and implemented the typicality standard with an actuarial approach. As implemented, the typicality standard requires the State's proposed EHB-benchmark plan to provide a scope of benefits equal to the scope of benefits provided under a typical employer plan, in accordance with section 1302(b)(2) of the ACA. At § 156.111(b)(2) we selected as the specified examples of a typical employer plan: the selecting State's 10 base-benchmark plan options established at § 156.100 and available for the selecting State's selection for the 2017 plan year, and a set of large group health insurance plans in the State, provided certain requirements are met under current § 156.111(b)(2)(i)(B)(*1*)–(*4*). In order for a State to select one of these large group health insurance plans as the typical employer plan for the typicality standard, the following requirements must be met: (1) the plan must have at least 10 percent of the total enrollment of the five largest large group health insurance products in the State; (2) the plan must provide minimum value, as defined under § 156.145; (3) the plan's benefits must not be excepted benefits, as established under § 146.145(b) and § 148.220; and (4) the benefits in the plan must be from a plan year beginning after December 31, 2013.

In the 2019 Payment Notice (83 FR 17012), we stated that ''a State's EHB-benchmark plan may not have the exact same benefits and limits as the typical employer plan the State identifies under this policy.'' However, this actuarial approach, which restricts the range of typical employer plans to which an EHB-benchmark plan can be compared, coupled with the requirement that the EHB-benchmark plan cover items and services in each of the 10 specified categories of EHB, assures that the scope of benefits of the EHB-benchmark plan is equal to that of a typical employer plan.

Restricting the set of group health plans for the typicality standard to major medical plans merely establishes this actuarial benchmark for State EHB selections in a manner that balances State flexibility, ease of implementation, and a limitation on the range of what can be considered a typical employer plan.

When we originally implemented § 156.115(d) to prohibit issuers from covering routine non-pediatric dental services, routine non-pediatric eye exam services, long-term/custodial nursing home care benefits, and non-medically necessary orthodontia as EHB, we did so based on a finding that ''they are not typically included in medical plans offered by a typical employer.'' However, this finding did not conclude that such benefits are never included in such plans. In addition, such a finding only justifies the prohibition of designating certain benefits as EHB; it does not prohibit a State from including such benefits in their typicality analysis, to the extent such benefits are present among the set of typical employer plans designated by HHS. Put another way, nothing in regulation prohibits a State from including the quantitative value of routine non-pediatric dental services, routine non-pediatric eye exam services, long-term/custodial nursing home care benefits, or non-medically necessary orthodontia in its typicality analysis. Rather, we simply did not include non-major-medical benefits in the selected range of typical employer plans for ease of comparability.

Comment: Many commenters supported this proposal because it promotes State flexibility. One commenter explained that they are supportive of proposals that offer additional flexibility to States and allow States to make decisions that best meet the needs of consumers. Another commenter explained that determining exactly which dental benefits should include EHB protections should be based on State needs and preferences. Several other commenters believed HHS should require all States to include routine non-pediatric dental benefits as an EHB, potentially in the ambulatory or preventive services EHB categories. These commenters argued that given HHS's interpretation of non-pediatric dental services as commonly included as part of typical employer-sponsored plans, adding non-pediatric dental benefits as a required coverage category under EHB is the logical next step.

National Academies Press (US); 1993. 2, Origins and Evolution of Employment-Based Health Benefits. Available from: *https://www.ncbi.nlm.nih.gov/books/NBK235989/.*

[283] *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2950754/.*

[284] *Id.*

[285] *https://www.kff.org/wp-content/uploads/2011/03/5-02-13-history-of-health-reform.pdf.*

[286] See section 1302(b)(4)(C) of the ACA.

Response: We agree with the commenters who mentioned that this proposal promotes State flexibility. This proposal aligns with CMS' State-based approach to EHB-benchmark plans and the ability for States to update them, in that, like any other benefit, States would have the option to add routine non-pediatric dental services as an EHB. We stress that the finalization of this proposal does not require any State to add such services as an EHB, nor would we consider any existing language regarding covered routine non-pediatric dental services in any State's current EHB-benchmark plan to have the effect of automatically adding such services as an EHB without further State action. We are therefore not adopting those commenters' suggestions to require the coverage of routine non-pediatric dental services as an EHB.

Comment: Many commenters raised potential operational impacts associated with States adding routine non-pediatric dental as EHB. Several commenters expressed that such an addition would present operational difficulties, including establishing new administrative and IT capabilities, and developing networks of dental providers. A few commenters expressed concern over issues with Current Dental Terminology (CDT) codes (for example, issuers' lack of experience with or infrastructure working with CDT codes, which may lead to cost concerns, additional premiums, and an overall increase in health care spending). A few commenters also requested to delay the finalization of this policy and requested the effective date be no sooner than PY 2027. A few commenters expressed concern regarding the impact on stand-alone dental premiums sold on the Exchange if routine non-pediatric dental benefits were to be included in a State's EHB-benchmark plan, and potential disparities between dental plan premiums on- versus off-Exchange. Moreover, many commenters questioned the impact this policy would have on other Federal provisions, including but not limited to provisions addressing: AV, MLR, network adequacy, APTC, and the premium adjustment percentage index (PAPI). One commenter suggested a separate dental MLR for dental EHB.

Response: We acknowledge the operational concerns raised by commenters. As we stated in the proposed rule (88 FR 82598), we expect States to weigh the advantages of expanded dental services against the challenges of providing such services. We also acknowledged the need for States to consider that issuers may need to establish new networks of dental providers and that some plans may not currently have infrastructure or experience working with CDT codes. We agree that, for health plans that do not directly reimburse using dental codes, the transition to new coding would require investments in technology, staff, and internal expertise. We also agree this may lead to additional premiums and an overall increase in health care spending. However, as we emphasized in the proposed rule, a contract arrangement with issuers of stand-alone dental plans to administer these services is an option that issuers could pursue, which could mitigate some of the need to establish new administrative and IT capabilities. We emphasize that for States planning to update their EHB-benchmark plan to include routine non-pediatric dental benefits, it will be up to those States to work with issuers and other interested parties to determine to what extent operational challenges exist and whether it is feasible to overcome such challenges. In addition, any State considering the addition of such benefits should specifically seek feedback from interested parties on operational challenges as part of the public notice and an opportunity for public comment requirement at § 156.111(c).

We do not disagree with commenters that this policy may be disruptive to those issuers in States that add routine non-pediatric dental services as EHB; indeed, the intent of this policy was to effect a change in the availability of high-priority, high-impact, and relative low-cost benefits as EHB in order to improve the overall health of large segments of the population, and we cited several of these challenges in the proposed rule. We are sympathetic to the upfront costs that may be incurred by issuers to create the infrastructure necessary to administer routine dental benefits, or to contract with third parties to administer such a benefit on the health plan's behalf. However, we believe action is justified given the likelihood that it results in significant public health improvements. In addition, we expect States to take these burdens into account in determining whether to add routine non-pediatric dental services as EHB.

We also do not agree with the commenters' concerns regarding this amendment's impact on stand-alone dental premiums sold on the Exchange if a State adds routine non-pediatric dental benefits as EHB, and potential disparities between dental plan premiums on- versus off-Exchange. Under §§ 146.145(b)(3) and 148.220(b)(1), limited-scope dental plans are considered excepted benefits that are not required to provide the EHB. Thus, if a State adds routine non-pediatric dental benefits as EHB, stand-alone dental plans are not required to cover such benefits, whether on- or off-Exchange.

We also acknowledge the commenters that questioned the impact this policy will have on other Federal provisions, including but not limited to provisions addressing AV, MLR, network adequacy, APTC, and PAPI. This final provision will not affect these programs any differently than any other benefits that a State adds to its EHB-benchmark plan, since States that seek to add routine non-pediatric dental services will need to adhere to the same requirements for updating their EHB-benchmark plans as they would for other benefits. We do encourage States adding routine non-pediatric dental services to ensure that issuers' networks include sufficient dental providers so that enrollees can access the benefit.

Comment: A few commenters explained that the risk profile of adults seeking dental care poses challenges for issuers, including the potential for adverse selection. This commenter expressed that enrollees could delay care until they have coverage, seek care for expensive procedures, and then drop coverage when the work is complete.

Response: We do not foresee that adverse selection will be a significant problem and would like to emphasize that the ACA has established means to help prevent unchecked adverse selection, including the risk adjustment program, premium subsidies, and limited enrollment windows. Specifically, enrollees must enroll during open enrollment or a special enrollment period. There is nothing specific or unique to dental coverage that would cause an enrollee to drop coverage midyear, other than possible pent-up demand for services due to the fact that coverage as EHB was previously not possible. However, based on prior experience under the ACA, and given that States will have to make difficult and careful decisions regarding which benefits to add given the regulatory requirements for EHB-benchmark plan updates, we do not believe that the addition of benefits will cause significant adverse selection. Additionally, adverse selection has not been a significant concern in prior EHB-benchmark plan applications.

Comment: A few commenters argued that CMS should allow for standalone non-pediatric dental plans to provide benefits as EHB on the Exchanges.

Response: Although we appreciate commenters' request to allow

standalone non-pediatric dental plans to provide benefits as EHB and to permit such plans on the Exchanges, as explained in the proposed rule, there is no statutory authority to do so. While section 1302(b)(4)(F) of the ACA permits a medical QHP sold on the Exchange to omit coverage of pediatric dental EHB services if an SADP is offered through an Exchange,[287] there is no statutory basis to extend this exception to routine non-pediatric dental services. Non-pediatric dental services would fall under ambulatory patient services, § 1302(b)(1)(A), and not pediatric services, § 1302(b)(1)(J). Thus, plans subject to an EHB-benchmark plan that include routine non-pediatric dental services as an EHB may not omit such coverage on the basis that a standalone dental plan already provides such coverage through an Exchange.

Comment: Many commenters noted cost impacts to consider when implementing this proposal. More specifically, many commenters expressed cost concerns, including the cost impacts the proposal could have on networks. Commenters noted this includes outsized impacts on small group health plans. These commenters explained that this proposal could result in issuers leaving the market. A few commenters expressed concerns over lack of cost controls if non-pediatric dental is an EHB. For example, these commenters expressed concern that no annual or lifetime coverage limits would apply to non-pediatric dental services if they were to be added as an EHB, which could drive up prices. One commenter noted that increased costs would have implications for QHPs in the individual and small group markets, including making it more difficult to offer standalone dental benefits at a price that is attractive to consumers, making QHPs with embedded dental benefits less affordable for consumers who do not qualify for a premium subsidy, and increasing the cost of Federal subsidies. Another commenter encouraged CMS to carefully weigh the benefit of expanded access to routine non-pediatric dental benefits versus the impact increased premiums may have on coverage retention. On the other hand, a few commenters mentioned the positive impact this policy could have on reducing health care costs. A few commenters explained how routine dental care may yield downstream savings in overall health care expenditures given its potential to impede disease burden. Another commenter also explained how emergency room department visits are very costly, and how if oral health problems are diverted to local dentist offices, large savings would ensue.

Response: We acknowledge the cost concerns raised by commenters, including the cost impacts it could have on networks. As we stated in the proposed rule (88 FR 82598), we expect States to weigh the advantages of expanded dental services against the challenges of providing such services. We also mentioned that States should consider the ability of plans to add such services as an EHB, which, as with pediatric oral care, may require plans to establish new networks of dental providers. Moreover, we mentioned that given the potential need for plans to establish new networks of dental providers, issuers could comply with this policy by contracting with issuers of standalone dental plans to administer these services, as long as it is seamless to the enrollee. This contracting arrangement would not be required, but it is permitted as an option. Furthermore, we agree with the commenters who stated that this policy would reduce health care costs by yielding downstream savings in overall health care expenditures and reducing costly emergency room department visits for dental care. We believe that the required public comment period that States must have when proposing to update their EHB-benchmark plans will become even more important considering this policy change. We also encourage States to work with issuers and other affected parties in their States before, during, and after applying to change their EHB-benchmark plan. Despite the prohibition on annual and lifetime dollar limits for benefits that are EHB and that States can choose how comprehensive the routine non-pediatric dental EHB will be, we are not swayed that this final policy will significantly increase premiums, and consequently, meaningfully increase Federal outlays, given that States' ability to increase benefit generosity is limited pursuant to the policy finalized at § 156.111(b)(2)(i). As we finalized in this final rule at § 156.111(b)(2)(i), we are revising the typicality standard so that the scope of benefits of a typical employer plan in a State would be defined as any scope of benefits that is *as or more generous* than the scope of benefits in the State's least generous typical employer plan, and *as or less generous* than the scope of benefits in the State's most generous typical employer plan. Therefore, a State interested in adding routine non-pediatric dental services as an EHB may need to consider removing and/or adjusting other benefits to make room for the non-pediatric dental services to fit into the scope of benefits within the State, to ensure the scope of benefits falls within the typicality range.

Comment: A few commenters responded to our solicitation for comment on the potential impact of this proposed policy on health insurance coverage in the large group and self-insured markets and on grandfathered plans. A few of these commenters expressed concern over the unintended cost impacts this policy would have on these groups, given that the prohibition in PHS Act section 2711 on imposing annual and lifetime dollar limits on EHB also generally applies to self-insured group health plans, large group market health plans, and grandfathered health plans. In particular, one commenter expressed concern that the proposal may have an outsized impact on employer-sponsored coverage that may be subject to greater than anticipated costs, given such coverage is not subject to risk adjustment. Another commenter expressed concern that increasing costs for those employers that do choose to include non-pediatric dental benefits in their major medical plans is not a desirable result.

Response: Self-insured group health plans, large group market health plans, and grandfathered group and individual health insurance coverage are not required to provide coverage of EHB. Accordingly, even where a State updates its EHB-benchmark plan to include routine non-pediatric dental coverage as EHB, self-insured group health plans, large group market health insurance coverage, and grandfathered plans would not be required to cover such services. We also note that, as highlighted in the preamble to the proposed rule, if a sponsor of a self-insured group health plan, large group market health insurance coverage, or grandfathered plan offers coverage of routine non-pediatric dental services through an excepted benefit under 26 CFR 54.9831–1(c)(3), 29 CFR 2590.732(c)(3), and 45 CFR 146.145(b)(3), including a limited-scope dental plan, that benefit is generally excepted from complying with the group market reforms, including the annual limitation on cost sharing and restrictions on annual or lifetime dollar limits. Therefore, a self-insured group health plan, large group market health insurance coverage, or grandfathered plan may only be impacted by the finalization of this policy if it covers routine non-pediatric dental services. For the purpose of the prohibition in PHS Act section 2711 on imposing

[287] See section 1311(d)(2)(B)(ii) of the ACA for more information on offering SADP benefits.

annual and lifetime dollar limits on EHB, a plan or issuer that is not required to provide EHB must define EHB in a manner consistent with an EHB-benchmark plan selected by a State in accordance with § 156.111, including coverage of any additional required benefits that are considered EHB consistent with § 155.170(a)(2).[288] Therefore, a plan sponsor could select an EHB-benchmark plan in a State that has not chosen to update its EHB-benchmark plan to include routine non-pediatric dental services as EHB.

However, section 2707(b) of the PHS Act requires all non-grandfathered group health plans, including non-grandfathered self-insured and non-grandfathered insured small and large group market health plans, to limit cost sharing imposed by the plan on EHB in accordance with the annual limitation on cost sharing, and section 2711(a)(1)(A) and (B) of the PHS Act generally prohibits all group health plans and group or individual health insurance coverage from establishing annual or lifetime dollar limits on the dollar value of EHB for any participant, beneficiary, or enrollee.[289] Previous guidance has stated that the Departments interpret PHS Act section 2707(b) as requiring all non-grandfathered group health plans to comply with the annual limitation on out-of-pocket maximums described in section 1302(c)(1) of the ACA,[290] and that the Departments will consider self-insured group health plans or large group market health plans to have used a permissible definition of EHB under section 1302(b) of the ACA if the definition is one that is authorized by the Secretary of HHS.[291]

Thus, for purposes of compliance with PHS Act sections 2707(b) and 2711, as applicable, a self-insured group health plan, large group market health insurance coverage, or grandfathered plan that selects an EHB-benchmark plan from a State that has updated its EHB-benchmark plan pursuant to this finalized policy to include routine non-pediatric dental services as an EHB would be required to treat routine non-pediatric dental services as EHB as they would with any other benefit that is an EHB in the selected benchmark plan. However, if the selected plan is from a State that has not updated its EHB-benchmark plan to include routine non-pediatric dental services as EHB, then those plans and issuers would not be required to treat routine non-pediatric dental services as EHB for purposes of complying with the annual limitation on cost sharing in PHS Act section 2707(b) or the prohibition in PHS Act section 2711 on imposing annual and lifetime dollar limits on EHB, as applicable, even if such benefits appear in the EHB-benchmark plan. As we stated in the proposed rule (88 FR 82598), we would not consider any existing language regarding routine non-pediatric dental services in any State's current EHB-benchmark plan to have the effect of adding such services as an EHB. Rather, States interested in covering routine non-pediatric dental services as EHB must proactively update their EHB-benchmark plans pursuant to § 156.111 to add such benefits.

We acknowledge that this policy could impact non-grandfathered self-insured group health plans, and large group market health insurance coverage that cover routine non-pediatric dental benefits with respect to their compliance with the annual limitation on cost sharing and this policy could impact all such plans, as well as grandfathered health plans, with respect to the prohibition on annual or lifetime dollar limits; however, we believe the advantages of this policy outweigh the disadvantages. Particularly, we believe the advantages—including improving access to routine non-pediatric dental care, reducing oral health disparities, improving health equity, and improving overall health and quality of life in these markets—are worth the potential cost or operational impacts to health plans.

Comment: Several commenters agreed with the proposal to remove the prohibition on including routine non-pediatric dental services as EHB. These commenters noted that the proposal would also apply to Medicaid ABPs and BHP standard health plans.

Response: We appreciate these comments and agree with their understanding of the applicability of this amendment to Medicaid ABPs and BHP standard health plans.

Comment: Several commenters responded to our solicitation for comment on whether similar changes should be proposed regarding the removal of the prohibition at § 156.115(d) on issuers from including routine non-pediatric eye exam services and long-term/custodial nursing home care benefits. Several commenters also responded to our solicitation for comment on our updated understanding on the inclusion of routine non-pediatric dental services in employer-sponsored or other job-based benefits. As we stated in the proposed rule (88 FR 82597), our updated understanding is that routine non-pediatric dental services are commonly covered as an employer-sponsored or other job-based benefit to a degree that warrants removing the prohibition on their provision as an EHB.

Response: For the reasons described in this section, we are finalizing removing routine non-pediatric dental services from the list of benefits at § 156.115(d) that a plan cannot include as EHB. As for the remaining list of benefits in § 156.115(d), we appreciate these comments and will continue to consider them for potential future rulemaking.

4. Prescription Drug Benefits (§ 156.122)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82599), we proposed revisions to certain EHB prescription drug benefit requirements at § 156.122, and requested comments on a possible future policy proposal, as further discussed below.

a. Classifying the Prescription Drug EHB

In the proposed rule, we requested information to confirm or further expand our understanding of the risks and benefits associated with replacing the reference to the USP MMG with a reference to the USP DC as a means of classifying the drugs required to be covered as EHB under § 156.122(a)(1). We thank commenters for their feedback and will take these comments into consideration if we pursue potential updates for future benefit years through notice and comment rulemaking.

b. Coverage of Prescription Drugs as EHB

We proposed to amend § 156.122 to codify that prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB. We stated that, as a result, they would be subject to the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits, unless the coverage of the drug is mandated by State action and is in addition to EHB pursuant to § 155.170, in which case the drug would not be considered EHB. When § 155.170 is read in conjunction with the proposed amendment to § 156.122, this means that any prescription drug that an issuer voluntarily covers in excess of the minimum number of drugs required to be covered under the State's EHB-benchmark plan is EHB *unless* there is

[288] 26 CFR 54.9815–2711(c)(2), 29 CFR 2590.715–2711(c)(2), and 45 CFR 147.126(c)(2).

[289] The provisions of PHS Act section 2711 apply to both grandfathered and non-grandfathered health plans, except the annual dollar limits prohibition does not apply to grandfathered individual health insurance coverage.

[290] FAQs Part XII, Q2 (February 20, 2013); see also the EHB Rule (78 FR 12835 through 12837).

[291] FAQs Part XVIII, Q2 (January 9, 2014); see also the 2019 Payment Notice (83 FR 17013).

a State mandate requiring such coverage.

In the EHB Rule (78 FR 12845), in response to commenter concerns regarding how plans must address new prescription drugs that come onto the market during the course of a plan year pursuant to § 156.122, we stated that while plans must offer at least the greater of one drug for each USP category and class or the number of drugs in the EHB-benchmark plan, plans are permitted to go beyond the number of drugs offered by the EHB-benchmark plan without exceeding EHB. We clarified in the preamble of the 2016 Payment Notice (80 FR 10749) in a discussion of requirements related to § 156.122(c) that this meant that if the plan is covering drugs beyond the number of drugs covered by the EHB-benchmark, all prescription drugs in excess of the drug count standard at § 156.122(a) are considered EHB, such that they are subject to EHB protections and must count towards the annual limitation on cost sharing.

In the proposed rule, we stated that we believed that this policy as noted in both the EHB Rule and preamble of the 2016 Payment Notice was clearly understood by issuers until we received comments in response to the EHB RFI that included a significant number of requests from interested parties to clarify this policy in rulemaking. In addition, a small number of commenters in response to the EHB RFI noted concerns regarding some plans that have stated that some prescription drugs in excess of the drug count standard at § 156.122(a) are not EHB and have developed programs to provide some drugs as ''non-EHB,'' outside of the terms of the rest of the coverage. We sought comment regarding how widespread these practices are.

To resolve these concerns, we proposed to amend § 156.122 to add paragraph (f), which would explicitly state that prescription drugs in excess of the EHB-benchmark plan are considered EHB. We stated that, to the extent that a health plan covers prescription drugs, in any circumstance, in excess of the EHB-benchmark plan, these drugs would be considered an EHB and would be required to count towards the annual limitation on cost sharing. We explained that this policy would apply unless the coverage of the drug is mandated by State action and is in addition to EHB pursuant to § 155.170, in which case the drug would not be considered EHB.

We noted that we had been made aware of a few plans within the individual and small group markets that have either developed or are offering programs that provide some drugs as ''non-EHB.'' We stated that, as we had only recently begun receiving comments from interested parties regarding this issue, we did not believe that there are a large number of plans that offer these types of programs; however, we sought comment regarding how widespread these programs are.

We sought comment on this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with a technical edit to the regulation text to clarify the entire scope of cost-sharing requirements that apply to these prescription drugs. In the proposed rule, we proposed that the prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB, and thus subject to both the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits. The proposed regulation text at § 156.122(f), however, referenced the annual limitation on cost sharing at § 156.130 as the only applicable cost-sharing requirement. We are finalizing the regulation text to reflect that prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB, and thus subject to both the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits.

We summarize and respond below to public comments received on the proposal to amend § 156.122 to codify that prescription drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB such that they are subject to EHB protections, including the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits, unless the coverage of the drug is mandated by State action and is in addition to EHB (in which case the drug would not be considered EHB). We also point readers to the preamble discussion above of § 155.170 regarding defrayal of State-mandated benefits, in which we clarified that a covered benefit in a State's EHB-benchmark plan is considered an EHB even if mandated by State action after 2011.

Comment: A majority of commenters supported the proposal to amend § 156.122 to codify that prescription drugs in excess of those covered by a State's EHB-benchmark plan are EHB. Several of these commenters expressed concern with any drugs being designated as ''non-EHB'' and noted that this was in conflict with HHS' longstanding policy that covered prescription drugs in excess of the minimum drug count standard at § 156.122(a)(1) are still EHB. A few commenters believed that the proposed rule did not explicitly state that issuers cannot designate certain drugs as ''non-EHB'' and encouraged HHS to further clarify that drugs cannot be classified as such and be in compliance with the regulation. Some commenters expressed concern that copay maximizers [292] and alternative funding programs [293] are working with issuers and PBMs to designate drugs as ''non-EHB,'' and when a drug is no longer a covered benefit and EHB, even if it is theoretically available through a copay maximizer or alternative funding program, consumers lose State and Federal protections such as the annual limitation on cost sharing, the restriction on annual and lifetime dollar limits, and protection against exposure to discriminatory benefit designs. Some commenters also noted that these copay maximizers and alternative funding programs argue that specialty drugs are not required to be covered under the ACA, and that all specialty drugs can therefore be excluded.

In response to our request for comment regarding how widespread programs to provide some drugs as non-EHB are, a few commenters noted that these types of programs have been identified more frequently in self-insured group health plans and large group market health plans.

Response: We are finalizing this proposal to amend § 156.122 as proposed. As stated in this rule, given the prevalence of these programs, we are concerned that consumers lose important protections if a covered drug is no longer considered EHB. The impacts of these practices, including additional out-of-pocket costs and loss of consumer protections, justify the finalization of this policy.

[292] With a copayment maximizer, select drugs are categorized as non-EHBs, allowing plans to exclude drug manufacturer assistance payments from counting toward the patient's deductible and out-of-pocket limitation. Zuckerman AD, Schneider MP, Dusetzina SB. Health Insurer Strategies to Reduce Specialty Drug Spending—Copayment Adjustment and Alternative Funding Programs. JAMA Intern Med. 2023;183(7):635–636. *Doi:10.1001/jamainternmed.2023.1829.*

[293] Under alternative funding programs, payers exclude some or all specialty drugs, such as some used for cancer, arthritis, psoriasis, and hemophilia, from their defined benefit. Patients are then referred to a third-party organization contracted by the plan's PBM to identify alternative funding options to obtain these excluded drugs, typically manufacturer patient assistance programs or other charitable assistance. When patients fail to meet the established criteria for manufacturer assistance, PBMs may reconsider drug coverage or, in some circumstances, source the medication from a pharmacy outside the U.S. at a lower cost. As a result, patients may face delays in starting a medication or may not be able to obtain the drug at all. *Id.*

We first stated that prescription drugs in excess of the minimum drug count do not exceed EHB in the EHB Rule (78 FR 12845), which was finalized over a decade ago, and we made clear in the 2016 Payment Notice (80 FR 10817) that ''if the plan is covering drugs beyond the number of drugs covered by the benchmark, all of these drugs are EHB and must count towards the annual limitation on cost sharing.'' In the proposed rule, we proposed to codify that, to the extent that a health plan covers prescription drugs, in any circumstance, in excess of the EHB-benchmark plan, these drugs would be considered EHB and would be required to count towards the annual limitation on cost sharing, unless the coverage of the drug is mandated by State action and is in addition to EHB pursuant to § 155.170, in which case the drug would not be considered EHB. Consequently, we now clarify that this interpretation means that issuers subject to the requirement to cover EHB will be considered to be failing to provide EHB if they do not treat those drugs as EHB, including by subjecting them to the annual limitation on cost sharing, by not applying annual or lifetime dollar limits, and by factoring them in the availability of APTCs, unless the drugs are mandated by State action. We agree with commenters' concerns that coverage is diminished if a drug is no longer considered EHB. For example, a plan might designate certain drugs as ''non-EHB,'' but indicate that the member can obtain coverage of such drugs so long as they enroll into a third-party program. If the member declines to enroll in the program or fills a prescription for a ''non-EHB'' drug outside of the program, they risk assuming responsibility for cost sharing that does not count towards the member's deductible or annual limitation on cost sharing.

From an operational perspective, it is not apparent on what basis issuers make distinctions between covered drugs that are EHB and ''non-EHB,'' including at what point certain drugs become ''too costly'' for the plan to consider them EHB. Further, it is not apparent that issuers are capable of readily explaining the rationale behind designations of ''non-EHB'' for specific drugs to consumers in advance of their enrollment in the plan. Even if an issuer is capable of explaining that rationale and providing any amount of notice to affected consumers in advance of their enrollment, we believe it is unreasonable to expect enrollees to be able to understand the complicated impacts that getting coverage for specific ''non-EHB'' drugs would have on enrollee out-of-pocket costs and consumer protections. This is especially true considering that those drugs most likely to be designated as ''non-EHB'' are drugs that are more likely to be prescribed for members of particularly vulnerable segments of the population.[294] The fact that the consumers that would be most affected by allowing drug coverage as ''non-EHB'' would be most negatively impacted by additional out-of-pocket costs and loss of consumer protections is further justification for the finalization of this policy.

We also find uncompelling the argument that issuers may classify drugs as specialty drugs or apply another similar label and thus designate them as ''non-EHB.'' We have not defined ''specialty drug'' for the purposes of EHB and formulary standards; rather, issuers must meet the formulary requirements at § 156.122. Accordingly, while the ACA does not explicitly identify specialty drugs within the category of prescription drugs that must be covered, the ACA also does not provide for a blanket exclusion from the EHB coverage requirement for such drugs, and therefore the requirements under § 156.122 apply to such drugs. Additionally, although EHB standards do not prohibit issuers from designating certain drugs as ''specialty'' drugs or tiering them as such if non-discriminatory, we believe it would be difficult, if not impossible, for an issuer to remove all drugs it currently deems ''specialty'' from the formulary and still be in compliance with § 156.122.

Comment: Some commenters stated that HHS lacks the statutory authority to include prescription drugs covered by plans in excess of those covered by a State's EHB-benchmark plan as EHB.

Response: Section 1302(b)(1) authorizes HHS to define the EHB, including items and services within the prescription drug category at § 1302(b)(1)(F). In this rule, we are exercising this authority to further define the prescription drugs that are considered EHB, which is clearly within HHS's statutory authority to define the EHB.

Comment: Some commenters stated that the final rule should make clear whether this policy applies to large group market and self-funded plans and suggested that it should. Conversely, several commenters urged HHS to clarify that this policy, if adopted, would not apply to self-insured and large group market plans. These commenters expressed concern that if the rule is extended to large group market and self-funded group health plans, it would be disruptive to formulary design, and plans may be forced to eliminate certain prescription drugs from their formularies due to increased plan costs. One commenter requested that if the policy were to apply to large group market and self-funded plans, the government provide a cost estimate to reflect the projected impact.

Response: The proposed rule primarily addressed the application of this policy with respect to issuers of non-grandfathered individual and small group market plans subject to the requirement to provide EHB. We are finalizing this proposal as proposed. This final rule does not address the application of this policy to large group market health plans and self-insured group health plans. While health insurance issuers offering non-grandfathered coverage in the individual and small group market are required to cover EHBs, self-insured group health plans and large group market health plans are not required to cover any EHBs. However, to the extent self-insured group health plans and large group market health plans cover EHBs, such plans must comply with the annual limitation on cost sharing under PHS Act section 2707(b) and annual and lifetime limit prohibitions under PHS Act section 2711, as applicable, with respect to those benefits.[295] HHS shares interpretative jurisdiction with the Department of Labor and the Department of the Treasury (collectively, the Departments) of the relevant requirements that are included in PHS Act sections 2707 and 2711, which are adopted by reference into the Employee Retirement Income Security Act (ERISA) through section 715 of ERISA and into the Internal Revenue Code (Code) through section 9815 of the Code. The Departments understand the questions raised by commenters with respect to large group market health plans and self-insured group health plans and intend to address the applicability of this policy to those plans in future notice-and-comment

[294] Assessment of racial and ethnic inequities in copay card utilization and enrollment in copay adjustment programs. J Manag Care Spec Pharm. 2023 Sep;29(9):1084–1092. Doi: 10.18553/jmcp.

[295] The provisions of PHS Act section 2707(b) apply to all non-grandfathered group health plans, including non-grandfathered self-insured and non-grandfathered insured small and large group market plans. The provisions of PHS Act section 2711 apply to both non-grandfathered and grandfathered group health plans and group or individual health insurance coverage, except the annual limits prohibition does not apply to grandfathered individual health insurance coverage.

rulemaking. Specifically, the Departments intend to propose rulemaking that would align the standards applicable to large group market health plans and self-insured group health plans with those applicable to individual and small group market plans, so that all group health plans and health insurance coverage subject to sections 2711 and 2707(b) of the PHS Act, as applicable, would be required to treat prescription drugs covered by the plan or coverage in excess of the applicable EHB-benchmark plan as EHB for purposes of the prohibition of lifetime and annual limits and the annual limitation on cost sharing, which would further strengthen the consumer protections in the ACA.

Comment: A few commenters asserted that the proposal may impact the viability of copay maximizer programs, which could cause enrollee cost sharing and plan premiums to increase, particularly for cost sharing related to specialty drugs. One commenter stated that these programs maximize the value of coupons to benefit the patient, taxpayers, and plan sponsors, and bring manufacturers to the table to negotiate on fair prices, particularly for self-insured plans, and urged HHS to consider this proposed policy change in the context of the broader policy debates related to manufacturers' use of copay coupons and copay assistance programs.

Response: As noted above, this policy was first stated in the EHB Rule in 2013 and addressed again in the 2016 Payment Notice and so we disagree that codification of a long-standing policy should cause significant changes for plans in the individual and small group markets. We will consider copay maximizer programs, as relevant, in any subsequent policy making about drug manufacturer assistance programs.

Comment: Some commenters noted that the policy may impact issuers' ability to manage prescription drug costs, which may lead to increased premiums and cost sharing. Commenters suggested that HHS consider whether the risk adjustment methodology appropriately supports this policy, and whether issuers may need additional benefit design flexibilities or other assistance to help contain costs. One commenter encouraged HHS to carefully consider how this policy change may inappropriately benefit manufacturers by encouraging them to increase list prices for certain drugs.

Response: We encourage issuers to continue to exceed minimum drug count requirements and remind them of P&T committee obligations at § 156.122(a)(3)(iii). Based on our review of formularies as part of QHP certification and as part of the form review for direct enforcement States, it is our understanding that issuers routinely exceed minimum requirements when developing formularies. We expect P&T committees to exercise sound decision-making and balance cost considerations with consumer needs. We share commenters' concerns about the increasing cost of prescription drugs in general. Therefore, we hope that drug manufacturers will negotiate with issuers and PBMs so that additional drugs can be included in formularies. Additionally, since this policy does not change the current treatment of prescription drugs in the individual and small group markets, codifying this policy will not impact the risk adjustment methodology.

Comment: Some commenters recommended that HHS monitor unintended consequences of this policy, if finalized as proposed, such as a potential decrease in the breadth of formularies beyond what is required by current regulation.

Response: We intend to monitor the breadth of formularies and will consider whether further regulation is warranted. However, we also note that this policy has been in place since at least the 2016 Payment Notice, so this is not a new interpretation. As noted in the proposed rule, we do not believe that the designation of drugs as ''non-EHB'' is currently pervasive in the individual and small group markets. Further, this provision is intended to operate in tandem with the other regulatory requirements at § 156.122, which impose other standards for prescription drug coverage. In particular, we highlight the requirements at § 156.122(a)(3)(iii), which place requirements on P&T committees to, among other things, ensure that formularies cover a range of drugs across a broad distribution of therapeutic categories and classes and provide appropriate access to drugs that are included in broadly accepted treatment guidelines and that are indicative of general best practices at the time.

Comment: One commenter requested clarification on how the proposed amendment to ''Additional Required Benefits (45 CFR 155.170)'' will impact the proposed amendment to § 156.122. The commenter noted that, as proposed, it appears there would be an exception to the codification in § 156.122 that prescription drugs in excess of the EHB-benchmark plan are considered EHB if a drug is mandated by State action and considered in addition to EHB pursuant to the defrayal standards at § 155.170. The commenter stated that this outcome appears to conflict with the proposed amendment to § 155.170(a)(2) which would provide that drug benefits covered in a State's EHB-benchmark plan would not be considered in addition to EHB and maintain its status as EHB.

Response: Pursuant to the finalized policy at § 155.170, any prescription drug that is covered in a State's EHB-benchmark plan is EHB, even if there is a State mandate requiring that specific drug to be covered. When read in conjunction with our clarification at § 156.122, this means that any prescription drug that an issuer voluntarily covers in excess of the State's EHB-benchmark plan is EHB *unless* there is a State mandate requiring such coverage.

c. Pharmacy and Therapeutics Committee Standards

For plan years beginning on or after January 1, 2026, we proposed to amend § 156.122 to provide that the P&T committee must include a consumer representative.

In the 2016 Payment Notice (80 FR 10749), we required plans providing EHB to establish P&T committees to review and update plan formularies in conjunction with the USP MMG. At § 156.122(a)(3)(i), we require P&T committees to: (a) have members that represent a sufficient number of clinical specialties to adequately meet the needs of enrollees; (b) consist of a majority of individuals who are practicing physicians, practicing pharmacists, and other practicing health care professionals who are licensed to prescribe drugs; (c) prohibit any member with a conflict of interest with respect to the issuer or a pharmaceutical manufacturer from voting on any matters for which the conflict exists; and (d) require at least 20 percent of its membership to have no conflict of interest with respect to the issuer and any pharmaceutical manufacturer.

We noted in the proposed rule that many of the P&T committee requirements are also found in the Principles of a Sound Drug Formulary System, which was first developed in September 1999 by a coalition of national organizations representing health care professionals, government, and business leaders and later adopted in 2000 by the Academy of Managed Care Pharmacy (AMCP), Alliance of Community Health Plans, American Medical Association, American Society of Health-Systems Pharmacists, Department of Veterans Affairs, Pharmacy Benefits Management Strategic Healthcare Group, National

Business Coalition on Health, and U.S. Pharmacopeia.[296] We further noted that since that time, best practices for P&T committees have matured throughout the health care system. In 2019, AMCP convened a group of thought leaders, clinicians, academics, patient advocacy organizations, payer organizations, and members of the pharmaceutical industry to consider P&T committee best practices in today's evolving health care system.[297] Specifically, the group provided perspectives on: (a) P&T committee composition and relevant interested parties, (b) evaluation of emerging evidence for formulary decisions and recommendations around training of P&T committee members, and (c) characteristics and best practices of successful committees.

While a P&T committee is usually composed of actively practicing physicians, pharmacists, and other health care professionals, forum participants stated that a well-structured committee should also include patient representation since it provides additional insight into the patient perspective regarding the practical use of therapies and effects on quality-of-life outcomes, which can be a helpful component of the formulary evaluation process. Additionally, participants noted that the patient perspective should be considered a key voice in formulary decisions as they are directly affected by P&T committee decisions and can assist the committee in better understanding the value of different treatments and medications for patients.

We stated in the proposed rule that while we are aware that the inclusion of consumers in the P&T committee process is not common, it has been observed in different health care systems. We noted that one example of this practice includes the Uniform Formulary Beneficiary Advisory Panel (UFBAP), which provides independent advice and recommendation on the development of the TRICARE Uniform formulary.[298] Members of the UFBAP include nongovernmental organizations and associations that represent the views and interests of a large number of eligible covered beneficiaries, contractors responsible for the TRICARE retail pharmacy program, contractors responsible for the national mail-order pharmacy program, and TRICARE network providers. We further noted additional examples of States that include clinicians such as physicians, pharmacists, and other specialists along with consumer or patient representatives as members of their respective P&T committees, including Pennsylvania,[299] Connecticut,[300] and New York.[301]

We explained in the proposed rule that P&T committee decisions have the power to impact a consumer's overall quality of life and encompass important elements of care and cost for the consumer. Therefore, we proposed to add paragraph (a)(3)(i)(E) to § 156.122 to update P&T membership standards to require the P&T committee to include a consumer representative as part of its membership for plan years beginning on or after January 1, 2026. In addition, we proposed to specify at § 156.122(a)(3)(E)(*1*) through (*4*) membership standards for consumer representatives. Specifically, we stated that the consumer representative would be required to represent the consumer perspective as a member of the P&T committee and would be required to have an affiliation with and/or demonstrate active participation in consumer or community-based organizations. We stated that some examples of these types of organizations include those that are representative of a community, or significant segments of a community, that provide educational or related direct services to individuals in the community, and organizations that protect consumer rights via advocacy, research, or outreach efforts. We explained that as a P&T committee member, the consumer representative would assume responsibility for highlighting and addressing any potential risks and benefits to consumers that could result from P&T committee actions. In addition, we explained that an affiliation with and/or active participation in a consumer or community-based organization would provide the consumer representative with the necessary background to represent consumers' perspectives. We further stated that if the proposed rule were finalized as proposed, issuers would also be required to select a consumer representative who has experience in the analysis and interpretation of complex data and is able to understand its public health significance, bearing in mind that one of the duties as a member of a P&T committee would include thoughtful consideration of clinical criteria, such as drug safety and efficacy data, when making a recommendation about products under review. We further stated that this individual would also be required to have no fiduciary obligation to a health facility or other health agency and no material financial interest in the rendering of health care services. We explained that this conflict-of-interest standard is intended to ensure that, as a member of the P&T committee, the consumer representative is free from financial interests or other relationships that could compromise the objectivity of committee members as they perform their duties. We also noted that nothing in this proposal would prevent the P&T committee from defining additional membership standards pertaining to the position of consumer representative.

We stated in the proposed rule that we believe the proposed addition of § 156.122(a)(3)(i)(E) would ensure that the consumer experience with a disease or condition is considered in the design of formulary benefits. We explained that consumer representatives would offer insights into real consumer experiences unknown to P&T committees, which would educate the committee on consumer challenges related to medication use and assist the committee in exploring solutions to these challenges during the formulary development process. We also noted that broader inclusion of perspectives on the P&T committee would align with other groups, including the AMCP.

We sought comment on these proposals. We stated that the consumer representative, as a member of the P&T committee, would be subject to the conflict-of-interest standards as specified in § 156.122(a)(3); however, we stated we were interested in comments regarding whether we should further define additional membership standards for the consumer representative. In particular, we sought comments on the qualifications necessary to serve as a consumer representative on a P&T committee, to

[296] Hawkins, B., ed. (2011). Principles of a sound drug formulary system. Best Practices for Hospital and Health System Pharmacy: Positions and Guidance Documents of ASHP. American Society of Health-System Pharmacists. *https://www.ashp.org/-/media/assets/policy-guidelines/docs/endorsed-documents/endorsed-documents-principles-sound-drug-formulary-system.pdf.*

[297] AMCP Partnership Forum: Principles for Sound Pharmacy and Therapeutics (P&T) Committee Practices: What's Next? (2020). *J Manag Care Spec Pharm, 26(1), 48–53. https://doi.org/10.18553/jmcp.2020.26.1.48.*

[298] Charter: Uniform Formulary Beneficiary Advisory Panel. *https://health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Pharmacy-Operations/BAP.*

[299] The Pennsylvania Department of Human Services Pharmacy and Therapeutics Committee. See *https://www.dhs.pa.gov/about/DHS-Information/Pages/Stakeholders/Pharmacy-Committee.aspx.*

[300] The Connecticut Medical Assistance Program Pharmaceutical and Therapeutics Committee. See *https://www.cga.ct.gov/current/pub/chap_319v.htm#sec_17b-274d* and *https://www.ctdssmap.com/CTPortal/Portals/0/StaticContent/Publications/CT_PT_COMMITTEE_BYLAWS_v2.pdf.*

[301] New York State Department of Health Drug Utilization Review (DUR). See *https://www.health.ny.gov/health_care/medicaid/program/dur/docs/board_membership.pdf.*

include if the representative should have a clinical background, have served as a representative of organizations with a regional or Statewide constituency, or have been involved in activities related to health care consumer advocacy, including issues affecting individual and small group market enrollees. We also sought comment on whether the current conflict-of-interest provision is sufficient as applied to this proposed role, or whether the consumer representative role should be subject to additional conflict-of-interest standards. We sought comment on whether a consumer representative should have a background for more than one condition or disease to sufficiently represent the concerns of a diverse population. Additionally, we sought comment on the number of consumer representatives who should be included on a committee and if that number should be directly proportional to the size of the committee. We also recognized that a requirement to develop additional P&T committee standards, solicit for applicants for this new position, and provide any necessary training to new members would require lead time for States, issuers, and pharmacy benefit managers to implement and we sought comment on the proposed timing for implementation.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with the following modifications: (1) we are making a change to § 156.122(a)(3)(i)(E) introductory text, § 156.122(a)(3)(i)(E)(*1*), and § 156.122(a)(3)(i)(E)(*2*) to replace ''consumer'' with ''patient''; (2) we are amending § 156.122(a)(3)(i)(E) introductory text to include the term ''at minimum one'' to reflect that at least one patient representative is required, and that additional patient representatives may serve on a P&T committee; (3) we are modifying § 156.122(a)(3)(i)(E)(*2*) to broaden the experience requirement to serve as a patient representative by requiring that the patient representative have relevant experience or participation in patient or community-based organizations; (4) we are modifying § 156.122(a)(3)(i)(E)(*3*) to broaden the clinical requirement to serve as a patient representative by requiring that the patient representative be able to demonstrate the ability to integrate data interpretations with practical patient considerations; (5) we are adding § 156.122(a)(3)(i)(E)(*5*) to reflect an education requirement to serve as a patient representative in which the patient representative is required to have a broad understanding of one or more conditions or diseases, associated treatment options, and research; and (6) we are adding § 156.122(a)(3)(i)(E)(*6*) to require the patient representative to disclose financial interests on their conflict-of-interest statements. Disclosed financial interests must include all interests with any entity that would benefit from decisions regarding plan formularies as well as specific information about these financial interests, such as the nature of the relationship and the value of the financial interest. We summarize and respond below to public comments received on the proposal to amend § 156.122 to provide that the P&T committee must include a consumer representative.

Comment: Two commenters encouraged CMS to amend the language of § 156.122(a)(3)(i)(E) to use the term ''patient representative'' as opposed to ''consumer representative.'' Both commenters noted that patient-centered approaches aim to ensure clinical care meets patients' needs and preferences, which is different from a consumer orientation, which calls on patients to be prudent purchasers of medical care.

Response: We agree that the term ''consumer representative'' may not accurately represent the full scope of the insight that such a representative offers to a P&T committee and may not be primarily associated with a patient-centered role. We acknowledge that the use of the term ''consumer'' to some, may be more closely associated with purchases and consumption. However, we believe the proposed rule was clear in our intention that the term ''consumer representative'' did not limit the scope of this representative's role to only ''consumer'' concerns. As discussed in the preamble, this representative will serve on a P&T committee to provide additional insight into the patient perspective regarding the practical use of therapies and effect on quality-of-life outcomes as part of the formulary evaluation process and assist the committee in better understanding the value of different treatments and medications for patients. We also did not intend to require the representative and the P&T committee to make overly technical distinctions between ''consumer'' and ''patient'' concerns, when both are necessary for this representative to ensure that the experience of people with a given disease or condition is considered in the design of formulary benefits which should help the committee better understand the challenges of those impacted related to medication use as well as assist the committee in exploring solutions to these challenges during the formulary development process. Nevertheless, we agree with commenters that the term ''patient representative'' is a more appropriate term in this context. As such, we are finalizing this proposal with a change to replace ''consumer'' with ''patient'' at § 156.122(a)(3)(i)(E) introductory text and § 156.122(a)(3)(i)(E)(*1*) and (*2*).

Comment: We received many comments in response to our request for comments (88 FR 82602) regarding whether we should further define additional membership standards for the patient representative in this rule, including what qualifications and conflict-of-interest standards may be necessary to effectively implement the proposal. One commenter urged CMS to require that the patient representative have clinical experience. One commenter noted that while a clinical background should be encouraged, it should not be required, as it could exclude highly qualified patient representatives who have other expertise to contribute, such as from experience in public or community health, health care policy development, or administration. Additionally, one commenter noted that limiting the position to only those with a clinical background may negatively impact the value of adding patients' voices to these committees. Two commenters recommended that the patient representative have a background in one or more conditions or diseases. Conversely, several commenters argued that the addition of a member without medical and scientific training to offer meaningful input on committee decisions would significantly and negatively impact the scientific rigor of P&T committee discussions, which are aimed to develop prescription drug formularies.

Finally, a few commenters recommended that the patient representative should function in an advisory or non-voting capacity. Two commenters suggested that patient representatives serving on the P&T committees must have clinical experience to have voting rights. One commenter recommended that patient representatives meet existing P&T committee membership criteria or be barred from voting rights.

Response: First, we are finalizing our proposal with modification to include an additional standard at § 156.122 (a)(3)(i)(E)(*5*) to require the patient representative to have a broad understanding of one or more conditions or diseases, associated treatment options, and research. In the proposed rule, we specifically sought

comment on what the qualifications may be necessary to serve as a patient representative on a P&T committee, including whether the representative should have a clinical background and whether the patient representative should have a background for more than one condition or disease to sufficiently represent the concerns of a diverse population. Although we agree with commenters that while a clinical background can be beneficial for a patient representative, this need not be a regulatory requirement for the patient representative, as their role on the committee is to provide insights from a patient perspective and not necessarily with a clinical background. Additionally, we do not agree that the addition of a patient representative to a P&T committee will hinder the quality of scientific exchange that occurs between members of the committee. The addition of a patient representative is meant to enhance the committee's ability to make well-informed decisions by incorporating the perspectives and experiences of the individuals directly affected by pharmaceutical and therapeutic choices. The inclusion of this member role will promote transparency, accountability, and a more patient-centered approach to health care.

However, we agree with commenters that noted that a patient representative should have background knowledge related to more than one condition or disease to sufficiently represent the concerns of a diverse population. Background knowledge of a given condition or disease can include but is not limited to information about the causes, symptoms, risk factors, diagnostic methods, available treatments, and potential outcomes associated with a specific medical condition or disease. The addition of the standard at § 156.122(a)(3)(i)(E)(*5*) will ensure that the patient representative is able to effectively communicate and collaborate with other clinically focused committee members as a result of the requirement that they have a foundational knowledge related to the treatment and management of a more than one condition or disease while also representing the needs and experiences of patients.

We disagree that patient representatives should function in an advisory role or non-voting capacity or that the voting rights of a patient representative be dependent upon clinical experience. Unlike members of the P&T committee who serve in a clinical capacity, such as the physician, pharmacist, or nurse, the patient representative is included as a member of the P&T committee to serve in a non-clinical capacity to offer insight into real patient experiences that P&T committees may be unaware of that would help the committee better understand patient challenges related to medication use as well as assist them in exploring solutions to these challenges during the formulary development process. Additionally, in States where P&T committees already include patient representatives, such as Pennsylvania, Connecticut, and New York, which include clinicians along with consumer or patient representatives, voting rights are extended to all members. We are not aware of States that require P&T committees to include patient representatives where those members are not afforded voting privileges. These examples demonstrate to us that, once a qualified candidate has been identified to serve as a patient representative and becomes a member of the P&T committee, this member should be granted voting privileges like all other committee members who meet member requirements and fulfill the duties associated with their role.

Comment: A few commenters recommended that the number of patient representatives should be proportional to the size of the P&T committee, to help ensure adequate patient representation. Conversely, a few commenters recommended that, if finalized, the requirement should be to include only one patient representative on the P&T committee.

Response: We appreciate the commenters' suggestions, but we will not revise the regulatory text to require additional patient representatives at this time because we want to ensure that plans are able to successfully identify and incorporate at least one patient representative on their P&T committees without inflicting undue burden on issuers to implement this new requirement. We are finalizing a non-substantive revision to specify that a health plan must include ''at minimum one'' patient representative to allow health plans the ability to use additional patient representatives at their option. We will continue to monitor this requirement and may consider increasing the number of patient representatives required on a P&T committee in the future.

Comment: In the proposed rule, we noted that we were interested in comments regarding whether the current conflict-of-interest provision at § 156.122(a)(3) is sufficient as applied to the proposed role, or whether the patient representative role should be subject to additional conflict-of-interest standards. We received several comments regarding how we should further define this membership standard in this rule. Several commenters stated that patient representatives attached to a patient or consumer advocacy organization may pose conflict-of-interest concerns as this could be an avenue for individuals affiliated, either explicitly or otherwise, with pharmaceutical manufacturers to gain representation on a P&T committee. Additionally, a few commenters recommended that CMS strengthen provisions to ensure that an individual has no link (direct or indirect) to a drug manufacturer. One commenter recommended that HHS collaborate with patient organizations and other interested parties to develop additional standards to appropriately safeguard against potential conflicts of interest and encouraged HHS to review resources from the NHC on best practices for integrating the patient voice into health care decision making.

Response: We acknowledge that the requirement that the patient representative have relevant experience or participation in patient or community-based organizations could result in financial conflicts of interest if, for example, the community-based organization the patient representative is affiliated with has a financial or material arrangement with pharmaceutical manufacturers. Additionally, we reiterate that the patient representative serves on the P&T committee to help the committee better understand the challenges of those impacted related to medication use as well as assist the committee in exploring solutions to these challenges during the formulary development process and should not be considered a role to be used by pharmaceutical manufacturers to gain representation on the P&T committee resulting in the prioritization of access over appropriate clinical evidence. We agree with commenters that the conflict-of-interest standards should include safeguards from inappropriate direct or indirect pharmaceutical manufacturer influence on P&T committee decisions and, as such, we are finalizing a new conflict-of-interest standard at § 156.122(a)(3)(i)(E)(*6*) that will require the patient representative to disclose financial interests on their conflict-of-interest statements. Disclosed financial interests must include all interests with any entity that would benefit from decisions regarding plan formularies as well as specific information about these financial interests, such as the nature of

the relationship and the value of the financial interest.[302]

Finally, we appreciate the suggestion to collaborate with patient organizations and interested parties to enhance standards and address potential conflicts of interest. We may consider developing additional standards to be applied to patient representatives on the P&T committee in the future and will consider such collaboration.

Comment: Several commenters recommended that CMS encourage alternative mechanisms for patient engagement with P&T committees, such as requiring annual training sessions for P&T committees that discuss the patient perspective, allowing existing members to attest to a consumer interest, requiring P&T committees to publish a plain language summary of the principles used to establish a formulary, or requiring issuers to hold consumer forums to capture patient feedback that can be shared with clinical teams.

Response: We do not believe that the alternative mechanisms suggested by commenters for patient engagement with P&T committees would be as effective as the addition of a patient representative to serve as a member of the P&T committee. The addition of this member to the P&T committee will offer the opportunity for members to be consistently engaged at every meeting in the discussion of topics related to patient experiences, patient challenges related to medication access and use, as well as exploring solutions to these challenges during the formulary benefit design process.

Comment: A few commenters expressed concerns that the criteria set forth for the patient representative in the proposed regulation are too stringent and will limit the ability of plans and issuers to recruit a qualified consumer representative if required to do so. One commenter noted that the requirement for a patient representative to have an affiliation with or participation in a consumer group should not be a strict standard given the difficulty that issuers may encounter identifying qualifying patient representatives. This same commenter also noted that it may be difficult to find patient representatives who are working or participating in consumer or community-based organizations that have sufficient experience to analyze, interpret, and understand the public health impact of complex scientific data. Additionally, the commenter recommended amending the criteria to reflect the demands of the role to listen to interpretations of the data and be thoughtful in marrying those interpretations with the practical considerations that impact consumers. A few commenters recommended that HHS consider an exceptions process from meeting this standard for an issuer that makes a good faith effort but is unable to find a qualified consumer representative. Two commenters recommended that HHS allow adequate time for implementation of this policy, if finalized, for plans and issuers to locate and onboard new consumer representatives without delaying pressing P&T meetings and approvals.

Response: In general, we agree with commenters that requiring that the patient representative have an affiliation with and/or demonstrate active participation in consumer or community-based organizations is restrictive. We did not intend for this requirement to limit the ability of issuers to recruit a qualified patient representative. As noted in the preamble, we believe the inclusion of a patient representative on the P&T committee is necessary to ensure that the patient experience with a disease or condition is considered in the design of formulary benefits. While an affiliation with and/or the ability to demonstrate active participation in consumer or community-based organizations may be an ideal path for a candidate to have obtained the necessary experience to serve as a patient representative, we acknowledge that the relevant experience necessary to serve as a patient representative can also be obtained from working in roles that directly impact or support patient care and well-being. This could include positions in health care administration, patient advocacy, nursing, medical social work, or roles focused on improving patient experience and outcomes. We are amending § 156.122(a)(3)(i)(E)(*2*) to state that the patient representative must have relevant experience or participation in patient or community-based organizations. We believe that broadening the background experience necessary to serve as a patient representative will expand the pool of qualified candidates when searching for a patient representative to serve on the P&T committee which should further reduce any barriers for issuers to meet this requirement.

Further, we agree with commenters that requiring the patient representative to have experience in the analysis and interpretation of complex data and be able to understand its public health significance is also restrictive. The background requirement as proposed may not easily be identified in candidates who only have relevant experience or participation in patient or community-based organizations unless they have additional background experience in interdisciplinary fields such as epidemiology, biostatistics, or data science where they would have gained the expertise needed to analyze and interpret complex data with a focus on public health significance. While this level of experience could be beneficial, we agree that it should not be a prerequisite for serving as a patient representative on a P&T committee considering that this member will serve in a non-clinical capacity to provide additional insight into the patient perspective regarding the practical use of therapies and effect on quality-of-life outcomes. We acknowledge that the proposed requirements may not accurately reflect the practical demands of the role and therefore may hinder issuer recruitment of qualified candidates to serve as a patient representative on the P&T committee, which was not our intent. However, we believe the patient representative should be able to demonstrate the ability to attentively consider data interpretations and thoughtfully integrate them with practical considerations affecting patients in order to help them contribute meaningfully to P&T committee member discussions and to assist the committee in better understanding the value of different treatments and medications for patients. Therefore, we are amending § 156.122(a)(3)(i)(E)(*3*) to require that the patient representative be able to demonstrate the ability to integrate data interpretations with practical patient considerations. We believe broadening this requirement will help to further assist issuers in identifying qualified candidates to serve as patient representatives.

In response to comments, we considered the establishment of an exception process should a health plan make a good faith effort and is unable to find a qualified candidate to serve as a patient representative. However, we are concerned that if we allow an exception process, this may incentivize some issuers to identify loopholes to obtain an exception to the rule and not make a meaningful attempt to comply with the requirements set forth to seek out a qualified candidate to serve as a patient representative on the P&T committee. Not implementing an exception process ensures consistent application of the policy, minimizes potential loopholes, and maintains a

[302] Department of Health and Human Services. Office of Inspector General. Gaps in Oversight of Conflicts of Interest In Medicare Prescription Drug Decisions. March 2013. *https://oig.hhs.gov/oei/reports/oei-05-10-00450.pdf.*

clear and standardized approach for all issuers.

As noted above, we are finalizing this policy with modifications to broaden certain requirements to further assist issuers in identifying qualified candidates to serve as patient representatives. We recognize the challenges that plans and issuers may encounter while recruiting a qualified candidate to serve as a patient representative. However, several States currently include at least one patient representative as a member of their P&T committee which indicates that these committees were able to identify qualified candidates who are willing to serve in this role. We encourage issuers to reach out to their State should they experience challenges while making a good faith effort to identify a qualified candidate to serve as a patient representative and comply with this new requirement, as the State is responsible for the oversight and enforcement of the P&T committee standards.

Comment: One commenter encouraged CMS to consider including additional flexibility to account for the possibility that health plan P&T committees already include patient representatives. The commenter also recommended that CMS allow for the flexibility to combine consumer representative positions under State requirements that may already be in place so that one or more consumer advocates can advocate for both Medicaid and commercial health plan members.

Response: We do not believe that the requirement for health plans in the non-grandfathered individual and small group market to include a patient representative materially conflicts with any existing State requirements on these markets. No commenter identified any existing State requirements related to similar P&T committee membership standards, which comports with our own research of any potential conflicts in this space. Thus, we do not believe it is necessary to revise the proposal to accommodate any such potential conflicts. To the extent any may exist, we expect to work closely with any State regulators and provide technical assistance to affected health plans to ensure that P&T committee membership standards come into compliance with this rule with minimal burden. In addition, to the extent a health plan in these markets currently voluntarily has a patient representative on its P&T committees, we expect such health plans to ensure that any existing patient representatives meet the minimum membership standards imposed by this rule.

Comment: One commenter recommended that CMS maintain the ability for issuers to include additional standards for consumer representatives noting that issuers should have the flexibility to establish criteria to demonstrate the individual's ability to participate on the P&T committee and standards to handle conflicts of interests.

Response: As noted in the proposed rule, nothing in this proposal would prevent the P&T committee from defining additional membership standards pertaining to the position of patient representative.

5. Publication of the 2025 Premium Adjustment Percentage, Maximum Annual Limitation on Cost Sharing, Reduced Maximum Annual Limitation on Cost Sharing, and Required Contribution Percentage in Guidance (§ 156.130)

As established in part 2 of the 2022 Payment Notice (86 FR 24238), we publish the premium adjustment percentage, the required contribution percentage, and maximum annual limitations on cost sharing and reduced maximum annual limitation on cost sharing in guidance annually starting with the 2023 benefit year. We note that these parameters are not included in this rulemaking, as we did not propose to change the methodology for these parameters for the 2025 benefit year. Instead, on November 15, 2023, we published these 2025 benefit year parameters in guidance in accordance our 2022 Payment Notice regulations.[303]

6. Standardized Plan Options (§ 156.201)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82603), HHS proposed to exercise its authority under sections 1311(c)(1) and 1321(a)(1)(B) of the ACA to make minor updates to the standardized plan options for PY 2025. Section 1311(c)(1) of the ACA directs the Secretary to establish criteria for the certification of health plans as QHPs. Section 1321(a)(1)(B) of the ACA directs the Secretary to issue regulations that set standards for meeting the requirements of title I of the ACA for, among other things, the offering of QHPs through such Exchanges.

Specifically, we proposed to make minor updates to the plan designs for PY 2025 to ensure these plans have AVs within the permissible *de minimis* range for each metal level. We proposed to otherwise maintain continuity regarding the approach to standardized plan options finalized in the 2023 and 2024 Payment Notices. Our proposed updates to plan designs for PY 2025 were detailed in Tables 12 and 13 in the proposed rule. We did not propose to amend § 156.201. We refer readers to the proposed rule (88 FR 82603 through 82604) for background discussion regarding our proposed approach to standardized plan options, and to the preambles of the 2023 and 2024 Payment Notices discussing § 156.201 (87 FR 27310 through 27322 and 88 FR 25847 through 25855, respectively) for a detailed discussion regarding the approaches to standardized plan options finalized in those Payment Notices.

We proposed this approach for several reasons. In the proposed rule (88 FR 82604), we explained that we intended to continue to require FFE and SBE–FP issuers to offer standardized plan options in large part due to continued plan proliferation, which has only increased since the standardized plan option requirements were finalized in the 2023 Payment Notice. We stated that, in light of this continued plan proliferation, it is increasingly important to continue to attempt to streamline and simplify the plan selection process for consumers on the Exchanges. We explained that we believe these standardized plan options continue to play a meaningful role in that simplification by reducing the number of variables that consumers must consider when selecting a plan option, making it easier for consumers to compare available plan options.

More specifically, we stated that with these standardized plan options, consumers continue to be able to more easily consider meaningful factors, such as networks, formularies, and premiums, when selecting a plan. We stated that we further believe these standardized plan options include several distinctive features, such as enhanced pre-deductible coverage for several benefit categories and copayments instead of coinsurance rates for a greater number of benefit categories, that will continue to play an important role in reducing barriers to access, combatting discriminatory benefit designs, and advancing health equity.

We explained that including enhanced pre-deductible coverage for these benefit categories (specifically, primary care visits, specialist visits, speech therapy, occupational and physical therapy, and generic drugs at all metal levels, with an increasing number of benefit categories exempt at

[303] *https://www.cms.gov/files/document/2025-papi-parameters-guidance-2023-11-15.pdf.*

higher metal levels) ensures consumers are more easily able to access these services without first meeting their deductibles. Additionally, we explained that using copayments instead of coinsurance rates for a greater number of benefit categories reduces the risk of unexpected financial expenses sometimes associated with coinsurance rates.

Furthermore, we proposed to maintain a high degree of continuity with many aspects of the standardized plan option policy finalized in the 2024 Payment Notice to reduce the risk of disruption for all involved interested parties, including issuers, agents, brokers, States, and enrollees. We stated that we believe making major departures from the methodology used to create the standardized plan options finalized in the 2023 and 2024 Payment Notices could result in drastic changes in these plan designs that may create undue burden for interested parties. For example, we noted that if the standardized plan options that we create vary significantly from year to year, those enrolled in these plans could experience unexpected financial harm if the cost sharing for services they rely upon differs substantially from the previous year. We stated that we ultimately believe consistency in standardized plan options is important to allow issuers and enrollees to become accustomed to these plan designs.

We sought comment on our proposed approach to standardized plan options for PY 2025. Additionally, we sought comment on requiring issuers offering QHPs in individual market State Exchanges to offer, in a future plan year, some version of standardized plan options, while not necessarily subjecting them to the full scope of standardized plan option requirements applicable to issuers offering QHPs through the FFEs or SBE–FPs under § 156.201.

In particular, we sought comment on requiring issuers offering QHPs in individual market State Exchanges that are not already required to offer standardized plan options under State requirements to offer some version of standardized plan options, even if these plan designs differ from the requirements of those included in the applicable Payment Notice for that plan year. We also sought comment on requiring States that intend to transition their Exchange model type from an FFE or SBE–FP to a State Exchange to require their issuers to offer standardized plan options as one condition of this transition. As such, we stated that we were particularly interested in comments from individual market State Exchanges that do not currently require QHP issuers to offer standardized plan options, States with an FFE or SBE–FP Exchange model type that intend to transition their Exchange model type to a State Exchange, and issuers offering QHPs through such Exchanges.

We explained that while we recognize that State Exchanges are generally best positioned to set the requirements that serve the nuances of their respective individual markets, we underscored the benefits of offering at least some version of standardized plan options, which we discussed in greater detail in the preamble discussion of § 156.201 in the 2023 Payment Notice (87 FR 27316). We also explained that we believe the fact that over half of all State Exchanges currently require issuers to offer standardized plan options in one form or another suggests that they, too, see value in standardized plan options.

TABLE 11—2025 STANDARDIZED OPTIONS SET ONE (FOR ALL FFE AND SBE–FP ISSUERS, EXCLUDING ISSUERS IN DELAWARE, LOUISIANA, AND OREGON)

	Expanded Bronze	Standard Silver	Silver 73 CSR	Silver 87 CSR	Silver 94 CSR	Gold	Platinum
Actuarial Value	63.81%	70.01%	73.09%	87.33%	94.14%	78.06%	88.04%
Deductible	$7,500	$5,000	$3,000	$500	$0	$1,500	$0
Maximum Out-of-Pocket Limitation	$9,200	$8,000	$6,400	$3,000	$2,000	$7,800	$4,300
Emergency Room Services	50%	40%	40%	30%	*25%	25%	*$100
Inpatient Hospital Services (Including Mental Health & Substance Use Disorder)	50%	40%	40%	30%	*25%	25%	*$350
Primary Care Visit	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Urgent Care	*$75	*$60	*$60	*$30	*$5	*$45	*$15
Specialist Visit	*$100	*$80	*$80	*$40	*$10	*$60	*$20
Mental Health & Substance Use Disorder Outpatient Office Visit	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Imaging (CT/PET Scans, MRIs)	50%	40%	40%	30%	*25%	25%	*$100
Speech Therapy	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Occupational, Physical Therapy	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Laboratory Services	50%	40%	40%	30%	*25%	25%	*$30
X-rays/Diagnostic Imaging	50%	40%	40%	30%	*25%	25%	*$30
Skilled Nursing Facility	50%	40%	40%	30%	*25%	25%	*$150
Outpatient Facility Fee (Ambulatory Surgery Center)	50%	40%	40%	30%	*25%	25%	*$150
Outpatient Surgery Physician & Services	50%	40%	40%	30%	*25%	25%	*$150
Generic Drugs	*$25	*$20	*$20	*$10	*$0	*$15	*$5
Preferred Brand Drugs	$50	*$40	*$40	*$20	*$15	*$30	*$10
Non-Preferred Brand Drugs	$100	$80	$80	$60	*$50	*$60	*$50
Specialty Drugs	$500	$350	$350	$250	*$150	*$250	*$150

*Benefit category not subject to the deductible.

TABLE 12—2025 STANDARDIZED OPTIONS SET TWO (FOR ISSUERS IN DELAWARE AND LOUISIANA)

	Expanded bronze	Standard silver	Silver 73 CSR	Silver 87 CSR	Silver 94 CSR	Gold	Platinum
Actuarial Value	63.81%	70.01%	73.10%	87.36%	94.37%	78.10%	88.07%
Deductible	$7,500	$5,000	$3,000	$500	$0	$1,500	$0
Maximum Out-of-Pocket Limitation	$9,200	$8,000	$6,400	$3,000	$2,000	$7,800	$4,300
Emergency Room Services	50%	40%	40%	30%	*25%	25%	*$100
Inpatient Hospital Services (Including Mental Health & Substance Use Disorder)	50%	40%	40%	30%	*25%	25%	*$350
Primary Care Visit	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Urgent Care	*$75	*$60	*$60	*$30	*$5	*$45	*$15

TABLE 12—2025 STANDARDIZED OPTIONS SET TWO (FOR ISSUERS IN DELAWARE AND LOUISIANA)—Continued

	Expanded bronze	Standard silver	Silver 73 CSR	Silver 87 CSR	Silver 94 CSR	Gold	Platinum
Specialist Visit	*$100	*$80	*$80	*$40	*$10	*$60	*$20
Mental Health & Substance Use Disorder Outpatient Office Visit	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Imaging (CT/PET Scans, MRIs)	50%	40%	40%	30%	*25%	25%	*$100
Speech Therapy	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Occupational, Physical Therapy	*$50	*$40	*$40	*$20	*$0	*$30	*$10
Laboratory Services	50%	40%	40%	30%	*25%	25%	*$30
X-rays/Diagnostic Imaging	50%	40%	40%	30%	*25%	25%	*$30
Skilled Nursing Facility	50%	40%	40%	30%	*25%	25%	*$150
Outpatient Facility Fee (Ambulatory Surgery Center)	50%	40%	40%	30%	*25%	25%	*$150
Outpatient Surgery Physician & Services	50%	40%	40%	30%	*25%	25%	*$150
Generic Drugs	*$25	*$20	*$20	*$10	*$0	*$15	*$5
Preferred Brand Drugs	$50	*$40	*$40	*$20	*$5	*$30	*$10
Non-Preferred Brand Drugs	$100	$80	$80	$60	*$10	*$60	*$50
Specialty Drugs	$150	$125	$125	$100	*$20	*$100	*$75

*Benefit category not subject to the deductible.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing our proposed approach with respect to standardized plan options, as proposed. Our finalized plan designs for PY 2025 are detailed in Tables 11 and 12 of this final rule and reflect no changes to the plan designs in Tables 12 and 13 of the proposed rule. We summarize and respond to public comments received on the proposed approach to standardized plan options below.

Comment: Many commenters supported continuing to require FFE and SBE–FP QHP issuers to offer standardized plan options. These commenters explained that with continued plan proliferation, the risk persists that consumers may experience plan choice overload as they attempt to navigate the plan selection process. Commenters explained that these standardized plan options continue to play an important role in streamlining the plan selection process by reducing the number of variables consumers must consider when selecting a plan that best fits their unique health care needs.

In particular, commenters explained that standardizing the cost sharing parameters for these plans allows consumers to focus on other important plan attributes, such as networks, formularies, quality ratings, and premiums, when selecting a plan. This in turn allows consumers to ensure the health plan they ultimately select has a network that includes providers important to them, a formulary that includes critical prescription drug coverage, and quality ratings that meet consumers' desired standards. Commenters further explained that promoting informed decision-making reduces the risk of plan choice overload, suboptimal plan selection, and unexpected financial harm for those consumers least able to afford it.

Several commenters also supported the continuation of differential display of these standardized plan options on *HealthCare.gov* to further facilitate the plan selection process. These commenters explained that continuing to differentially display these plans would help make it easier for consumers to make meaningful comparisons of available plan options. Several commenters also recommended making ''additional enhancements'' to choice architecture and the user experience on *HealthCare.gov* to further streamline consumer decision-making.

Response: We agree that standardized plan options continue to serve as one important facet of HHS' multifaceted strategy of reducing the rate of plan proliferation, the risk of plan choice overload, the frequency of suboptimal plan selection, and incidences of unexpected financial harm for consumers. We believe that continuing to require issuers to offer these standardized plan options, reducing the non-standardized plan option limit, introducing the non-standardized plan option limit exceptions process (which is described in more detail in section III.E.7 of the preamble of this final rule), continuing to differentially display these standardized plan options on *HealthCare.gov*, and enhancing choice architecture and the user experience on *HealthCare.gov* represent a comprehensive approach to improving Exchange coverage.

Regarding the comments recommending that we make ''additional enhancements'' to choice architecture and the user experience on *HealthCare.gov* to further streamline consumer decision-making, the commenters did not specify, and we are unsure, what they mean by ''additional enhancements.'' However, as noted earlier, we agree that enhancing choice architecture and the user experience on *HealthCare.gov* will help improve Exchange coverage, including by streamlining consumer decision-making, and we will consider additional ways to do so in the future.

Comment: Several commenters opposed continuing to require issuers to offer these standardized plan options. These commenters explained that continuing to subject issuers to these requirements inhibits issuer innovation in plan designs. These commenters explained that issuers are most familiar with the unique health care needs of their enrollees and that they should therefore be given the leeway to design plans that meet these needs. Several of these commenters also recommended the cessation of the differential display of these standardized plan options, explaining that these plans should not be given preferential treatment over non-standardized plan options.

Response: We disagree that continuing to require issuers in the FFEs and SBE–FPs to offer standardized plan options will inhibit issuer innovation in plan design, even with the reduction in the non-standardized plan option limit described in more detail in section III.E.7 of the preamble to this final rule. This is because, in PY 2025 and subsequent plan years, issuers will be permitted to offer two non-standardized plan options per product type, metal level, inclusion of dental and/or vision benefit coverage, and service area, as well as additional non-standardized plan options per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, so long as these additional plans substantially benefit consumers with chronic and high-cost conditions and meet the other criteria for the exceptions process finalized in this rule, as

explained in more detail in section III.E.7 of the preamble to this final rule.

We believe the fact that issuers continue to be permitted to offer these non-standardized plan options ensures that consumers will continue to have access to a sufficiently broad range of plan designs that meet their diverse needs and that issuers can continue to offer innovative plan designs. We further believe that continuing to require issuers to offer standardized plan options, reducing the non-standardized plan option limit, and introducing an exceptions process for this limit strikes an appropriate balance between limiting the risk of plan choice overload while simultaneously continuing to permit issuers a sufficient degree of flexibility to offer innovative plan designs.

Further, we reiterate that issuers are not limited in the number of standardized plan options they may offer, meaning issuers continue to retain the ability to offer standardized plan options with different benefit packages, networks, and formulary variations, so long as they conform to the required cost sharing parameters for these plans.

Finally, differential display of these standardized plan options on *HealthCare.gov* does not result in the preferential display of standardized plan options over non-standardized plan options, and we believe that this differential display strikes an appropriate balance between facilitating the plan selection process while still allowing consumers the opportunity to consider all available non-standardized plan options. The form of differential display currently employed on *HealthCare.gov* distinguishes standardized plan options from non-standardized plan options by assigning standardized plan options a visual icon and a corresponding label. That form of differential display also permits consumers to filter all available plan choices to see only standardized plan options. However, consumers must actively choose to employ this filter.

Furthermore, this form of differential display does not elevate standardized plan options to the top of the sorting feature over non-standardized plan options such that they would always be the first plans that consumers see regardless of premium, as would be done if standardized plan options were preferentially displayed. Thus, although standardized plan options are distinguished from non-standardized plan options, the form of differential display currently employed on *HealthCare.gov* allows consumers to easily see and compare all available plan options, including non-standardized plan options.

Comment: Many commenters supported our approach to the design of these standardized plan options for PY 2025. Specifically, commenters supported maintaining a high degree of continuity in these plan designs year over year to reduce the risk of unnecessary disruption for enrollees and issuers. Commenters explained that drastically modifying the plan designs from year to year could result in avoidable financial harm if the cost sharing for benefits that consumers depend upon increases unexpectedly, which may result in consumers forgoing obtaining medical care and, consequently, experiencing poorer health outcomes.

Response: We agree that maintaining a high degree of continuity in our standardized plan options from year to year is desirable for several reasons. Specifically, we agree that having consistent year-to-year plan designs allows enrollees to become better acquainted with these plans, increasing both consumer understanding and financial certainty. We also agree that drastically modifying the plan designs from year to year could result in avoidable financial harm if the cost sharing for benefits that consumers depend upon increases unexpectedly, which could also result in consumers forgoing obtaining medical care. Although we believe that, today, the benefits that may arise from making major modifications to these plan designs are outweighed by the risk that doing so could result in undue burden for issuers and enrollees, we may consider making major modifications to the design of these standardized plan options in future rulemakings if our assessment changes.

Comment: Several commenters made specific recommendations regarding particular aspects of the standardized plan options. Specifically, several of these commenters recommended lowering the maximum out-of-pocket values in these plan designs. We clarify that in this context, a plan's ''maximum out-of-pocket'' value refers to the plan's specific annual limitation on cost sharing value. These commenters explained that a high maximum out-of-pocket limitation on cost sharing places unreasonable burden on consumers with chronic and high-cost conditions. These commenters also explained that lowering the maximum out-of-pocket limitation on cost sharing values for these plans would advance health equity by reducing the amount that consumers from disadvantaged populations, whom commenters explained are disproportionately affected by chronic and high-cost conditions, must pay for the treatment of these conditions.

Several commenters also recommended lowering the deductibles and expanding pre-deductible coverage to include additional benefit categories. These commenters explained that high deductibles often act as an obstacle that prevents consumers from obtaining the health care they need. These commenters further explained that lowering the deductibles for these plans and expanding pre-deductible coverage would reduce barriers to access to health care, reducing the risk of consumers forgoing obtaining medical care and, consequently, experiencing poorer health outcomes.

Several commenters supported the decision to continue including copayments instead of coinsurance rates for a range of benefit categories within these plan designs. Several of these commenters recommended expanding the use of copayments to apply to a greater number of benefit categories. These commenters explained that utilizing copayments instead of coinsurance rates increases financial certainty for consumers when they obtain the health care they need. Other commenters recommended standardizing the cost-sharing parameters for additional benefit categories not already standardized within these plan designs to further enhance plan comparability and reduce financial uncertainty. Several commenters recommended including health savings account (HSA)-compliant high-deductible health plan (HDHP) designs in each of these sets of standardized plan options.

Response: We acknowledge that high maximum out-of-pocket limitation on cost sharing values, high deductibles, and limited pre-deductible coverage can sometimes act as barriers that prevent consumers, including those with chronic and high-cost conditions, from obtaining the health care they need. We also acknowledge that coinsurance rates can potentially increase consumer uncertainty regarding how much particular services may cost.

However, due to AV constraints arising from the permissible *de minimis* range restriction for each metal level in accordance with § 156.140(c)(2), we are unable to substantially lower the maximum out-of-pocket limitation or deductible values, expand pre-deductible coverage to include additional benefits, or include copayments as the form of cost sharing for a broader range of benefit categories without a corresponding increase in the

AV of each plan. Making some combination of these modifications would increase the generosity of these plans, potentially to the point of each plan's AV exceeding the permissible *de minimis range* for its respective metal level. Furthermore, even if making some combination of these changes resulted in an AV within the permissible *de minimis* range for each metal level, there would still be a corresponding increase in premiums that would render these plans costlier for consumers and potentially uncompetitive.

Finally, we note that although it may be possible to make some combination of these modifications to these plan designs while maintaining an AV near the floor of the *de minimis* range for each metal level, doing so would require a corresponding increase in cost sharing for other benefits or subjecting additional benefits to the deductible to offset this increase in generosity. Since the benefits that we have exempted from the deductible as well as the benefits for which we have reduced cost sharing are some of the most frequently utilized benefits, we believe that the disadvantages of subjecting these benefits to the deductible or increasing the cost sharing for these benefits would outweigh the benefit that may arise from exempting other benefits from the deductible or reducing cost sharing for other benefits. Those disadvantages include risks that these plans would become uncompetitive and that consumers would forego obtaining medical services covered by these frequently utilized benefits which would be newly subject to the deductible or have increased cost sharing.

We also note that we are not standardizing the cost sharing for additional benefit categories beyond those already included in these plan designs since EHB-benchmark plans vary significantly by State, and we do not wish to standardize the cost sharing for benefits that issuers may not be required to offer in particular States. We also note that we have not included an HSA-eligible HDHP in these sets of plan designs due to decreased enrollment in these plans in the last several plan years, which suggests they may be less competitive and in-demand than traditional health insurance plans.

We thus declined to include HSA-eligible HDHPs in these sets of plan designs because our approach is to design standardized plan options that reflect the most popular QHPs offered through the Exchanges (87 FR 27319). We also declined to include an HSA-eligible HDHP in these sets of plan designs because we have not included these types of plans in the sets of standardized plan options for PY 2023 or PY 2024, and we want to maintain a high degree of continuity with the standardized plan option policies and designs finalized in the 2023 and 2024 Payment Notices. However, we note that QHP issuers in the FFEs and SBE–FPs continue to be permitted to offer HSA-eligible HDHPs as non-standardized plan options, if so desired.

Comment: Many commenters supported expanding the requirement for issuers to offer standardized plan options to also apply to State Exchange issuers in a future plan year. Several of these commenters supported requiring all State Exchange issuers to offer some version of standardized plan options—including those issuers that are offering QHPs through already-established State Exchanges and are not currently subject to such a requirement. Other commenters supported requiring States that intend to transition their Exchange model type from an FFE or SBE–FP to a State Exchange to require their issuers to offer standardized plan options as a condition of that transition, while exempting issuers that are currently offering QHPs through State Exchanges and are not currently subject to such a requirement.

Many commenters pointed to the fact that many State Exchange issuers are already required to offer standardized plan options, which commenters argued demonstrates the utility of standardized plan options. These commenters further explained that the benefits of standardized plan options should not be limited to consumers purchasing health insurance coverage through FFEs and SBE–FPs—and instead, that these benefits should also be extended to consumers purchasing health insurance coverage through State Exchanges. Several of these commenters explained that the trend of plan proliferation that has been present in the FFEs and SBE–FPs for several years has also been present in many State Exchanges. These commenters thus explained that HHS should employ the same measures to address plan proliferation in State Exchanges that it utilizes in the FFEs and SBE–FPs.

Conversely, many commenters opposed requiring State Exchange issuers to offer some version of standardized plan options in a future plan year. Some of these commenters opposed expanding this requirement to all State Exchange issuers, while others only opposed expanding this requirement to State Exchange issuers not already subject to such a requirement. Other commenters only opposed expanding this requirement to State Exchange issuers as a condition of a State transitioning its Exchange model type from an FFE or SBE–FP to a State Exchange in a future plan year.

These commenters explained that expanding this requirement to apply to State Exchange issuers would unnecessarily constrain a State's flexibility in operating its Exchange. These commenters highlighted the importance of the flexibility inherent to the State Exchange model type as one of the primary factors that motivates States to pursue this model type. These commenters further explained that requiring State Exchange issuers to offer some version of standardized plan options would make it more difficult for issuers to tailor health plans to meet the unique needs of each State's population. These commenters also explained that State regulators' and issuers' experience with and insight into their respective individual markets makes them uniquely suited to determine whether standardized plan options fit the health care coverage needs of their consumers.

Response: We acknowledge the potential advantages and disadvantages of expanding the requirement that QHP issuers offer standardized plan options to State Exchange issuers, including the advantages and disadvantages of expanding this requirement to all State Exchange issuers not already subject to such a requirement, as well as the advantages and disadvantages of expanding this requirement only to issuers that offer QHPs through an Exchange that transitions from an FFE or SBE–FP to a State Exchange in a future plan year.

Consistent with our rationale for not expanding the requirement that QHP issuers offer standardized plan options to State Exchange issuers in the 2023 Payment Notice (87 FR 27311), we continue to believe that expanding this requirement to State Exchange issuers would unnecessarily constrain a State's flexibility in operating its Exchange. We further continue to believe that State Exchanges' experience with and insight into their respective individual markets makes them uniquely suited to determine whether standardized plan options fit the health care coverage needs of their consumers and, if so, how those plans should be designed. In addition, imposing duplicative standardized plan option requirements on issuers in State Exchanges that already have existing State standardized plan option requirements runs counter to our goals of enhancing the consumer experience, increasing consumer understanding, simplifying the plan selection process, combatting

discriminatory benefit designs, and advancing health equity.

We note that we will consider the potential advantages and disadvantages of expanding the requirement that QHP issuers offer standardized plan options to State Exchange issuers, including the advantages and disadvantages of expanding this requirement to all State Exchange issuers not already subject to such a requirement, as well as the advantages and disadvantages of expanding this requirement only to issuers that offer QHPs through an Exchange that transitions from an FFE or SBE–FP to a State Exchange in a future plan year. These considerations may inform our approach in any future rulemaking regarding standardized plan options.

7. Non-Standardized Plan Option Limits (§ 156.202)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82606), HHS proposed to exercise its authority under sections 1311(c)(1) and 1321(a)(1)(B) of the ACA to amend § 156.202 by adding paragraphs (d) and (e) to introduce an exceptions process that would allow issuers to offer additional non-standardized plan options per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area for PY 2025 and subsequent plan years, if issuers demonstrate that these additional non-standardized plans have specific design features that would substantially benefit consumers with chronic and high-cost conditions. Section 1311(c)(1) of the ACA directs the Secretary to establish criteria for the certification of health plans as QHPs. Section 1321(a)(1)(B) of the ACA directs the Secretary to issue regulations that set standards for meeting the requirements of title I of the ACA for, among other things, the offering of QHPs through such Exchanges.

In the 2024 Payment Notice (88 FR 25855 through 25865), we finalized requirements limiting the number of non-standardized plan options that issuers of QHPs can offer through Exchanges on the Federal platform (including SBE–FPs) to four non-standardized plan options per product network type (as described in the definition of ''product'' at § 144.103), metal level (excluding catastrophic plans), inclusion of dental and/or vision benefit coverage, and service area for PY 2024, and two for PY 2025 and subsequent plan years. In the 2025 Payment Notice proposed rule, we did not propose to amend these non-standardized plan option limits at § 156.202(a) through (b).

In the 2024 Payment Notice, we explained that we phased in this limit over 2 plan years (instead of adopting the limit of two in PY 2024) primarily to decrease the risk of disruption for both issuers and enrollees and to provide increased flexibility to issuers. We explained that many commenters supported adopting a more gradual approach in which the number of non-standardized plan options that issuers can offer is incrementally decreased over a span of 2 plan years, instead of adopting a limit of two for PY 2024. We referred readers to the preamble of the 2024 Payment Notice discussing § 156.202 (88 FR 25855 through 25865) for more detailed discussion of our approach to non-standardized plan option limits for PY 2024 and related background.

As a result of the limit on the number of non-standardized plan options that issuers can offer through the Exchanges being reduced from four in PY 2024 to two in PY 2025, in the proposed rule (88 FR 82607), we estimated (based on then-current PY 2024 plan offering data) that the weighted average number of non-standardized plan options available to each consumer would be reduced from 67.3 in PY 2024 to approximately 41.7 in PY 2025. We also estimated that the weighted average total number of plans, including both standardized and non-standardized plan options, available to each consumer would be reduced from 91.8 in PY 2024 to approximately 66.2 in PY 2025.[304]

Furthermore, in the proposed rule, we estimated that approximately 28,275 of the total 109,229 non-standardized plan option plan-county combinations [305] (25.9 percent) would be discontinued as a result of this limit in PY 2025. Relatedly, based on trended enrollment data from PY 2023 (which we relied on for purposes of this estimate because PY 2024 enrollment data was unavailable when we finalized the proposed rule), we estimated that approximately 1.78 million of the 14.94 million enrollees on the FFEs and SBE–FPs (11.9 percent) would be affected by these discontinuations in PY 2025.

However, based on updated PY 2024 plan offering and enrollment data, we now estimate that the weighted average number of non-standardized plan options available to each consumer will be reduced from 71.4 in PY 2024 to approximately 48.5 in PY 2025. Additionally, we estimate that the weighted average total number of plans, including standardized and non-standardized plan options, available to each consumer will be reduced from 99.5 in PY 2024 to approximately 76.6 in PY 2025.

Furthermore, based on this updated data, we estimate that approximately 27,660 of the total 87,620 non-standardized plan option plan-county combinations (31.6 percent) will be discontinued as a result of this limit in PY 2025. Relatedly, we estimate that approximately 1.43 million of the 16.34 million enrollees on the FFEs and SBE–FPs (8.7 percent) will be affected by these discontinuations in PY 2025.

In the proposed rule (88 FR 82607), we proposed an exceptions process at new § 156.202(d) and (e) that would permit FFE and SBE–FP issuers to offer more than two non-standardized plan options per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area for PY 2025 and subsequent plan years, if issuers demonstrate that these additional non-standardized plans beyond the limit at § 156.202(b) have specific design features that would substantially benefit consumers with chronic and high-cost conditions. We further proposed that issuers would not be limited in the number of exceptions permitted per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, so long as they meet specified criteria.

Specifically, we stated in the proposed rule that pursuant to proposed § 156.202(d), issuers would be permitted to offer more than two non-standardized plan options if these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area.

[304] The weighted average total number of plans available to each consumer was 107.8 in PY 2022, prior to the introduction of standardized plan option requirements, and 113.6 in PY 2023, the first year that standardized plan option requirements were introduced.

[305] Plan-county combinations are the count of unique plan ID and FIPS code combinations. This measure was used because a single plan may be available in multiple counties, and specific limits on non-standardized plan options or specific dollar deductible difference thresholds may have different impacts on one county where there are four plans of the same product network type and metal level versus another county where there are only two plans of the same product network type and metal level, for example.

We stated that the reduction could not be limited to a part of the year, or an otherwise limited scope of benefits. Instead, we stated that issuers would be required to apply the reduced cost sharing for these benefits any time the covered item or service is furnished. For example, we explained that an issuer could not reduce cost sharing for the first three office visits or drug fills and then increase it for remaining visits or drug fills. Furthermore, we stated that issuers would be prohibited from conditioning reduced cost sharing for these benefits on a particular diagnosis. That is, we stated that although the benefit design would have reduced cost sharing to address one or more articulated conditions, the reduced cost sharing must be available to all enrolled in the plan who receive the service(s) covered by the benefit.

We explained in the proposed rule that no other plan design features (such as the inclusion of additional benefit coverage, different provider networks, different formularies, or reduced cost sharing for benefits provided through the telehealth modality) would be evaluated under this exceptions process, meaning no other differences in plan design features would allow issuers to be excepted from the limit to the number of non-standardized plan options offered per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area.

Additionally, we stated in the proposed rule that, as part of this exceptions process, issuers would be required, under proposed § 156.202(e), to submit a written justification in a form and manner and at a time prescribed by HHS that provides additional details and explains how the particular plan design the issuer desires to offer above the non-standardized plan option limit of two satisfies the proposed standards for receiving an exception to this limit—namely, how the particular plan would substantially benefit consumers with chronic and high-cost conditions. We noted that we would provide issuers with a justification form upon publication of the final rule and when the QHP templates for the applicable plan year are released.

We proposed that this justification form would ask the issuer to (1) identify the specific condition(s) for which cost sharing is reduced, (2) explain which benefits would have reduced annual enrollee cost sharing (as opposed to reduced cost sharing for a limited number of visits) for the treatment of the specified condition(s) by 25 percent or more relative to the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan offerings in the same product network type, metal level, and service area, and (3) explain how the reduced cost sharing for these services pertains to clinically indicated guidelines for treatment of the specified chronic and high-cost condition(s).

Additionally, we stated that to allow the Exchange adequate time to review these justification forms, issuers would need to submit their QHP application in a form and manner and at a time specified by us. We further stated that we anticipated requesting that issuers submit QHP applications for non-standardized plan options that exceed the two-plan limit by the QHP certification Early Bird deadline.

We proposed to allow exceptions only for plans that meet the previously described requirements for benefits pertaining to the treatment of conditions that are chronic and high-cost in nature. We clarified that, for purposes of this standard, chronic conditions are those that have an average duration of one year or more and require ongoing medical attention or limit activities of daily living, or both.[306] We also clarified that, for purposes of this standard, high-cost conditions are those that account for a disproportionately high portion of total Federal health expenditures. We noted that the four chronic and high-cost conditions included in the prescription drug adverse tiering for PY 2025 (specifically, hepatitis C virus, HIV, multiple sclerosis, and rheumatoid arthritis) are examples of conditions that we would consider to be chronic and high-cost in nature for purposes of this standard.

However, for purposes of this standard, we clarified that we would also consider additional conditions to be chronic and high-cost in nature. We stated that additional representative examples of conditions that we would consider to be chronic and high-cost in nature for purposes of this proposal include Alzheimer's disease, kidney disease, osteoporosis, heart disease, diabetes, and all kinds of cancer. We further stated that examples of conditions that we would not consider chronic and high-cost in nature would be those that are generally acute in nature, including bronchitis, the flu, pneumonia, strep throat, and respiratory infections.

We proposed this approach for several reasons. Considering that chronic and high-cost conditions (including the examples previously discussed) affect a comparatively low number of consumers, we stated that we anticipated that a significant portion of the non-standardized plan options that may be discontinued due to having comparatively lower rates of enrollment among each issuer's portfolio of offerings could potentially be those that have plan design features that benefit consumers with these chronic and high-cost conditions (such as plans with some combination of enhanced pre-deductible coverage for relevant services, reduced cost sharing for relevant benefits, lower maximum out-of-pocket limitations, lower deductibles, more comprehensive provider networks with more specialized providers, more generous formularies with more specialized medications, higher AVs, and higher premiums).

We explained in the proposed rule (88 FR 82608) that even with comparatively lower rates of enrollment, these non-standardized plan options can still fulfill an important role in addressing chronic and high-cost conditions, which are responsible for a disproportionate amount of health care expenditures.[307] Thus, we stated that this proposed exceptions process could play an important role in enhancing the quality of life for those affected by these conditions, combatting health disparities, advancing health equity, and reducing health care expenditures. We further stated that introducing such an exceptions process while also reducing the non-standardized plan option limit to two for PY 2025 would balance the dual aims of reducing the risk of plan choice overload while simultaneously ensuring that truly innovative plan designs that may benefit consumers with chronic and high-cost conditions can continue to be offered.

We stated in the proposed rule that not limiting the number of permitted exceptions per issuer, product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area (instead of allowing exceptions for only two such plans, for example) would ensure that issuers are not restricted in the number of innovative plans they can offer. We noted that this would in turn help ensure that a greater portion of consumers with chronic and high-cost conditions have access to plans that reduce barriers to access to care for

[306] National Center for Chronic Disease Prevention and Health Promotion. *About Chronic Diseases,* July 21, 2022, *https://www.cdc.gov/chronicdisease/about/index.htm.*

[307] Waters, H, & Graf, M. (2018). The Cost of Chronic Disease in the U.S. Milken Institute. *https://milkeninstitute.org/sites/default/files/reports-pdf/ChronicDiseases-HighRes-FINAL2.pdf.*

services critical to the treatment of their conditions.

We further stated in the proposed rule (88 FR 82608), that although issuers would not be limited in the number of exceptions they may be granted under this proposal, we anticipated that most issuers would determine that the burden of creating and certifying additional non-standardized plans intended to benefit a comparatively small population of consumers would outweigh the benefit of doing so. We noted that we also previously solicited comments on innovative plan designs, such as in the 2024 Payment Notice proposed rule.

We stated that in response to this comment solicitation, we received only two examples of plan designs that commenters considered to be innovative in nature: plan designs that have reduced cost sharing for benefits provided through telehealth, and plan designs that have reduced cost sharing for services and medications related to the treatment of diabetes (such as in the form of insulin). We clarified that the former example (reduced cost sharing for benefits provided through the telehealth) would not qualify for this exceptions process, while the latter example (reduced cost sharing for benefits related to the treatment of diabetes) could potentially qualify for this exceptions process, if the specified criteria are met.

Regardless, we stated that given that we only received two examples of plan designs that particular issuers considered to be innovative in nature, we did not anticipate that issuers would seek to have a substantial number of non-standardized plan options excepted from the non-standardized plan option limit. As a result, we explained that we did not anticipate this proposal would result in an increased risk of plan choice overload for consumers interested in plans with better benefits for qualifying conditions.

We stated in the proposed rule (88 FR 82608), that permitting exceptions solely based on whether a non-standardized plan option has reduced cost sharing of 25 percent or more for benefits pertaining to the treatment of chronic and high-cost conditions, as opposed to considering other factors (such as specialized networks, specialized formularies, or specialized benefit packages), is appropriate since the current standardized plan option requirements do not limit issuers in the number of standardized plan options they can offer per product network type, metal level, or service area.

However, we noted that standardized plan option requirements do not permit issuers to deviate from the specified cost sharing parameters for standardized plan options—meaning issuers would not be able to offer standardized plan options with reduced cost sharing of 25 percent or more for the treatment of specific conditions if the benefit category's cost sharing does not comply with the specified standards. Thus, we noted that under the current standardized plan option framework, issuers already have the flexibility to offer specialized provider networks, formularies, and benefit packages (including those that decrease barriers to access for the treatment of chronic and high-cost conditions—such as by including additional specialized providers, prescription drugs, or benefits) as standardized plan options.

We further stated that the cost sharing difference threshold of 25 percent or more is appropriate since we have observed that cost sharing differences below this threshold represent normal variation within a particular metal level, while differences at or above this threshold are more often associated with cost sharing differences between different metal levels. We do not believe that a difference in a cost sharing amount that is of the same magnitude as normal variation within a particular metal level (specifically, less than 25 percent) would warrant being excepted from the non-standardized plan option limit.

We noted that under this proposed exceptions process, if additional plans were permitted to be offered in excess of the limit of two non-standardized plan options, in accordance with the guaranteed availability requirements at § 147.104(a), these plans would also be required to be made available on the same basis to consumers without these chronic and high-cost conditions. Further, we emphasized that these plans would be prohibited from discriminating in accordance with the nondiscrimination requirements at §§ 147.104(e), 156.125, and 156.200(e).[308] We noted that to meet these non-discrimination requirements, these plans would be required to apply preferential cost sharing to all enrolled in the plan, without regard to diagnosis.

Furthermore, although we acknowledged that non-standardized plan options excepted under this proposal would primarily benefit consumers with chronic and high-cost conditions, we stated that a sufficiently satisfactory range of both non-standardized and standardized plan options currently exist that are primarily intended for consumers without chronic and high-cost conditions. As a result, we explained that were not concerned that any risk of discrimination created by this exceptions process would negatively impact consumers, including but not limited to consumers with chronic and high-cost conditions.

We sought comment on this proposed approach. Specifically, we sought comment on the proposed exceptions process, and whether there should be any exceptions at all to the limit on the number of non-standardized plan options that issuers can offer through the Exchanges. In addition, we noted that we were particularly interested in comments on the following topics: whether exceptions should be permitted only for a specific set of chronic and high-cost conditions as opposed to any chronic and high-cost condition; whether there are other plan attributes we should consider outside of sufficiently differentiated cost sharing, such as the inclusion of alternative payment models or sufficiently differentiated benefits, networks, or formularies; the specific difference threshold for these cost-sharing amounts, including whether a threshold higher or lower than 25 percent would be more appropriate; the specific components of the justification form that issuers would be required to submit; the deadline for issuers to submit the materials necessary for us to consider whether non-standardized plan options should be excepted from the limit; and whether we should require that non-standardized plan options excepted from the limit be visually differentiated from other non-standardized plan options not excepted from the limit—such as by differentially displaying these excepted plans on *HealthCare.gov,* or by requiring these excepted plans to adopt a particular plan marketing name that accurately conveys how these plans would substantially benefit consumers with chronic and high-cost conditions (for example, by requiring that an excepted plan that reduces cost sharing for the treatment of diabetes have a corresponding plan marketing name related to diabetes).

We also sought comment on other ways to balance the dual aims of reducing the risk of plan choice overload while simultaneously ensuring that truly innovative plan designs that

[308] The nondiscrimination requirements at § 147.104(e) apply to health insurance issuers offering non-grandfathered group or individual health insurance coverage, and their officials, employees, agents, and representatives. The nondiscrimination requirements at § 156.200(e) apply to QHPs in the individual and small-group markets, and the nondiscrimination requirements at § 156.125(b) apply to issuers providing EHB.

may benefit consumers with chronic and high-cost conditions can continue to be offered. Specifically, we sought comment on whether we should limit the number of exceptions available such that issuers are only permitted to offer one or several additional plans pursuant to the proposed exceptions process above the limit of two non-standardized plans—as opposed to not limiting the number of exceptions permitted per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing this provision with the following modifications. In particular, we are finalizing at new § 156.202(d)(1) that a 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions will be evaluated at the level of total out-of-pocket costs for the treatment of the chronic and high-cost condition for a population of enrollees with the relevant chronic and high-cost condition.

In addition, we are moving the requirement that the reduction in cost sharing must not be limited to a part of the year, or an otherwise limited scope of benefits, from § 156.202(d) in the proposed regulation text to § 156.202(d)(2) in the final regulation text. We are also moving the requirement that the reduction in cost sharing for these benefits cannot be conditioned on a consumer having a particular diagnosis from § 156.202(d) in the proposed regulation text to § 156.202(d)(3) in the final regulation text.

We are also finalizing at new § 156.202(d)(4) that the required reduction in cost sharing only applies to the standard variant of the plan for which an issuer seeks an exception, and not to the income-based cost-sharing reduction plan variations required by § 156.420(a), nor to the zero and limited cost-sharing plan variations required by § 156.420(b). In addition, we are finalizing at new § 156.202(d)(5) that issuers are limited to one exception per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, for each chronic and high-cost condition. We are also moving the requirement that the chronic and high-cost conditions that may qualify an issuer for this exception will be determined by HHS from § 156.202(d) in the proposed regulation text to § 156.202(d)(6) in the final regulation text.

Furthermore, we are modifying the regulation text describing requirements related to the written justification issuers will be required to submit to utilize this exceptions process at § 156.202(e)(1) through (3), to more accurately reflect how the reduction in cost sharing will be evaluated under this exceptions process. Finally, we are adding a requirement at § 156.202(e)(4) for issuers to submit a corresponding actuarial memorandum demonstrating the underlying actuarial assumptions made in the design of the plan the issuer is requesting to except, which includes a confirmatory actuarial opinion. These modifications are discussed in greater detail later in this section.

In addition, we note that we no longer anticipate requesting that issuers submit exception requests and accompanying justification forms by the QHP certification Early Bird deadline. Instead, we anticipate that the exception request and justification form submission deadline for issuers seeking to utilize this exceptions process will be the initial submission deadline for QHP certification applications, aligning the exception request deadline with the submission deadlines for QHP certification applications for standardized and non-standardized plan option offerings.

We also clarify that the example included in the 2024 Payment Notice that illustrated issuer flexibility to vary the inclusion of dental and/or vision benefit coverage in accordance with § 156.202(c) under the non-standardized plan option limits at § 156.202(a) through (b) failed to distinguish between the adult and pediatric dental benefit coverage categories.

In the 2024 Payment Notice (88 FR 25858), we stated that for PY 2025, for example, an issuer will be permitted to offer two non-standardized gold HMOs with no additional dental or vision benefit coverage, two non-standardized gold HMOs with additional dental benefit coverage, two non-standardized gold HMOs with additional vision benefit coverage, and two non-standardized gold HMOs with additional dental and vision benefit coverage, as well as two non-standardized gold PPOs with no additional dental or vision benefit coverage, two non-standardized gold PPOs with additional dental benefit coverage, two non-standardized gold PPOs with additional vision benefit coverage, and two non-standardized gold PPOs with additional dental and vision benefit coverage, in the same service area.

However, in PY 2024, issuers had the ability to vary the inclusion of dental and/or vision benefit coverage (including varying the inclusion of the distinct adult and pediatric dental benefit coverage categories), such that issuers could offer plans in the manner reflected in Table 13, instead of in the more limited manner reflected in the incomplete example in the 2024 Payment Notice.

We affirm that issuers continue to retain this flexibility for PY 2025. Thus, under the non-standardized plan option limit of two for PY 2025, if an issuer desires to offer the theoretical maximum number of plans, and if that issuer varies the inclusion of dental and/or vision benefit coverage in these plans in accordance with the flexibility provided for at § 156.202(c)(1) through (3), that issuer could offer a theoretical maximum of 16 plans in a given product network type, metal level, and service area in the manner demonstrated in Table 13. Furthermore, if an issuer offers QHPs with two product network types (for example, HMO and PPO), that issuer could offer a theoretical maximum of 32 plans in a given metal level and service area in the manner demonstrated in Table 13.

TABLE 13—ISSUER FLEXIBILITY UNDER THE NON-STANDARDIZED PLAN OPTION LIMIT OF TWO FOR PY 2025 AND SUBSEQUENT YEARS

Plan	Network type	Cost sharing structure	Adult dental	Pediatric dental	Adult vision
1	HMO	A			
2	HMO	A	Covered		
3	HMO	A		Covered	
4	HMO	A			Covered
5	HMO	A		Covered	Covered
6	HMO	A	Covered		Covered

TABLE 13—ISSUER FLEXIBILITY UNDER THE NON-STANDARDIZED PLAN OPTION LIMIT OF TWO FOR PY 2025 AND SUBSEQUENT YEARS—Continued

Plan	Network type	Cost sharing structure	Adult dental	Pediatric dental	Adult vision
7	HMO	A	Covered	Covered	
8	HMO	A	Covered	Covered	Covered
9	HMO	B			
10	HMO	B	Covered		
11	HMO	B		Covered	
12	HMO	B			Covered
13	HMO	B		Covered	Covered
14	HMO	B	Covered		Covered
15	HMO	B	Covered	Covered	
16	HMO	B	Covered	Covered	Covered
17	PPO	C			
18	PPO	C	Covered		
19	PPO	C		Covered	
20	PPO	C			Covered
21	PPO	C		Covered	Covered
22	PPO	C	Covered		Covered
23	PPO	C	Covered	Covered	
24	PPO	C	Covered	Covered	Covered
25	PPO	D			
26	PPO	D	Covered		
27	PPO	D		Covered	
28	PPO	D			Covered
29	PPO	D		Covered	Covered
30	PPO	D	Covered		Covered
31	PPO	D	Covered	Covered	
32	PPO	D	Covered	Covered	Covered

Below, we summarize and respond to public comments received on the proposed non-standardized plan option limit exceptions process and the related issues we sought comment on.

Comment: Many commenters supported introducing an exceptions process that would allow issuers to offer non-standardized plan options exceeding the limit of two if the specified requirements are met. Several commenters explained that reducing the non-standardized plan option limit from four in PY 2024 to two in PY 2025 will cause issuers to discontinue plans with lower enrollment, which would likely be plans with designs that are attractive to a smaller number of enrollees that have relatively less common and high-cost health care needs. Commenters thus explained that many of the plans that would likely be discontinued would be those that benefit consumers with chronic and high-cost conditions. As such, commenters explained that permitting issuers to offer additional non-standardized plan options that provide targeted coverage specifically for medically complex populations with chronic and high-cost conditions supports health equity and allows for more targeted innovation by issuers, while still achieving the reduction in plan proliferation HHS has sought.

Many of these commenters noted that individuals with chronic and high-cost conditions are especially price-sensitive, and that, relative to the average enrollee, these individuals often encounter significantly higher out-of-pocket costs associated with the higher rates of utilization of the services related to treatment of these conditions. Commenters thus explained that plans reducing cost sharing for these services would allow consumers to more easily obtain the medical care they need, resulting in improved patient outcomes. Commenters further explained that this exceptions process could play an important role in advancing health equity by reducing cost sharing for conditions that disproportionately affect disadvantaged populations. Commenters specifically cited diabetes, COPD, HIV, hepatitis C, and rheumatoid arthritis as chronic and high-cost conditions that could be effectively targeted by issuers under this exceptions process.

Conversely, many commenters opposed introducing an exceptions process. Several of these commenters explained that introducing an exceptions process that would allow issuers to exceed the non-standardized plan option limit would contradict the action HHS has taken to reduce the rate of plan proliferation. Additionally, many commenters explained that prioritizing the treatment of chronic and high-cost conditions does not necessarily require HHS to permit issuers to offer additional non-standardized plans above the non-standardized plan option limit. They explained that plans could still be designed to include specialized benefits and cost sharing for those with chronic and high-cost health conditions within the non-standardized plan option limit.

Many commenters also explained that plans designed specifically to reduce cost sharing for services pertaining to the treatment of chronic and high-cost conditions are likely to involve trade-offs in the form of increasing cost sharing for other services. Commenters noted that consumers with chronic and high-cost conditions are still likely to experience other health needs and may be unlikely to realize a net benefit from the excepted plan if that plan precludes them from appropriately generous cost sharing for a broader set of services.

Response: We acknowledge that reducing the non-standardized plan option limit from four in PY 2024 to two in PY 2025 will cause issuers to discontinue plans, which will likely be those plans with lower rates of enrollment. We also acknowledge that these discontinued plans will likely be those with designs that are attractive to a smaller number of enrollees that have relatively less common and high-cost health care needs.

However, we agree that reducing the non-standardized plan option limit while simultaneously introducing a targeted exceptions process that will allow issuers to offer additional non-standardized plan options that substantially benefit consumers with chronic and high-cost conditions, including consumers who have relatively less common and high-cost health care needs, strikes an appropriate balance between reducing plan proliferation and the risk of plan choice overload while still permitting issuers a sufficient degree of flexibility to innovate as well as a sufficiently ensure a diverse range of plan offerings for consumers to select from.

We also agree that reducing cost sharing for benefits that pertain to the treatment of chronic and high-cost conditions will significantly reduce the total out-of-pocket costs for consumers with these conditions. We further agree that this reduction in out-of-pocket costs will allow consumers to more easily obtain the medical care they need, resulting in improved health outcomes. We also agree that improving health outcomes for consumers with chronic and high-cost conditions that disproportionately affect disadvantaged populations—including diabetes, COPD, HIV, hepatitis C, and rheumatoid arthritis—would advance health equity. Accordingly, we believe that the risk that these types of plans will be discontinued as a result of the reduction in the non-standardized plan option limit from four in PY 2024 to two in PY 2025 is sufficiently mitigated by the targeted exceptions process we are finalizing in this rule.

We also believe the criteria that we have set forth in the exceptions process finalized in this rule, such as requiring issuers to demonstrate that the additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions is at least 25 percent lower than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area, ensures that any excepted plans will be meaningfully different from other non-standardized plan options. We also believe these criteria will ensure that this exceptions process will not be utilized as a means to simply offer duplicative non-standardized plan options similar to existing plan offerings. Furthermore, in the last several plan years, the majority of FFE and SBE–FP issuers have not offered plans that would have been eligible for this exceptions process.

Although it is our hope that issuers will take advantage of this exceptions process as a means of advancing health equity, we also anticipate that issuers will carefully consider applying for such exceptions in general, particularly given the stringent requirements of the exceptions process. Furthermore, we note, in particular, that under § 156.202(d)(5), issuers are limited to one exception per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, for each chronic and high-cost condition. Thus, we believe there will be a very limited increase in the number of non-standardized plan options as a result of this exceptions process, and that the risk of the exceptions process causing a meaningful increase in plan proliferation is very low.

We also recognize the importance of plans designed specifically to improve cost sharing for services pertaining to the treatment of chronic and high-cost conditions, and we acknowledge the trade-offs that will likely be required for issuers to create and maintain these plans—namely, increased cost sharing for other services. We also acknowledge that plans could still technically be designed to include specialized benefits and cost sharing for those with chronic and high-cost health conditions within the non-standardized plan option limit.

However, we note that the plans that will likely be discontinued as a result of the reduction in the non-standardized plan option limit for PY 2025 and subsequent years will be those tailored to appeal to a smaller segment of the population—such as those with chronic and high-cost conditions. Thus, we believe this targeted exceptions process will effectively counterbalance the impact that the reduction of this limit may have on these types of plans and the consumers who rely on them. Consumers without the chronic and high-cost conditions targeted by plans that are likely to be discontinued can continue to select among the many available plans that have broader appeal.

Comment: Several commenters recommended limiting the number of exceptions that each issuer may be permitted under this process. These commenters explained that the intent of the non-standardized plan option limit is to mitigate the risk of uncontrolled plan proliferation that leads to consumer confusion, and that to not limit the number of potential exceptions each issuer may receive would counteract this intent. Relatedly, many commenters expressed concern that the number of non-standardized plan options in PY 2025 could exceed the number of non-standardized plan options in PY 2024 without a limit on the number of exceptions.

Conversely, several commenters opposed limiting the number of potential exceptions. These commenters stated that limiting the number of potential exceptions permitted for each issuer would unnecessarily restrict issuer innovation and may harm consumers who have a comparatively less common chronic and high-cost condition that issuers may choose to not target with this exceptions process, which could hinder efforts to advance health equity.

Response: In the proposed rule (88 FR 82609), we proposed that issuers would not be limited in the number of excepted plans they could offer but solicited comment on the utility of limiting the number of potential exceptions. We considered such a limitation at the time of the proposed rulemaking.

Upon consideration of comments, we share commenters' concerns that permitting an unlimited number of exceptions for each issuer runs counter to our goal of reducing the risk of plan proliferation, a non-standardized plan option policy goal we explained in the proposed rule (88 FR 82608). Without a limit on the number of exceptions permitted, issuers could choose to submit multiple exception requests for non-standardized plan options that reduce cost sharing for benefits pertaining to the treatment of the same chronic and high-cost condition—with minor or no differences between the benefits with reduced cost sharing, or with minor or no difference in the amount that cost sharing is reduced for these benefits.

For example, without a limit on the number of exceptions permitted, issuers could submit exception requests for two identical non-standardized plan options that reduce cost sharing for benefits pertaining to the treatment of diabetes—each of which reduce cost sharing for the same benefits by the same amount. We do not believe it would be in consumers' interest to permit issuers to offer both of these plans due to their duplicative nature. Specifically, we believe that permitting issuers to offer both of these plans creates significant risk of plan choice overload, which, as we noted in the proposed rule (88 FR 82608), we want to minimize. However, we also agree that limiting the total number of exceptions could harm consumers who have a comparatively less common chronic and high-cost condition that issuers may choose to not target with this exceptions process,

which would hinder efforts to advance health equity.

To balance these concerns, at § 156.202(d)(5), we are limiting issuers to one exception per chronic and high-cost condition, in each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area. Under this limitation, one exception would be permitted for each separate non-standardized plan option that reduces cost sharing for benefits pertaining to the treatment of a different chronic and high-cost condition—so long as the specified requirements are met.

For example, if an issuer submits exception requests for three separate plans in a given product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area (such as one plan that reduces cost sharing for benefits pertaining to the treatment of diabetes, one plan that reduces cost sharing for benefits pertaining to the treatment of COPD, and one plan that reduces cost sharing for benefits pertaining to the treatment of hepatitis C), we would permit exceptions for each of these plans, assuming these plans meet all other certification and exception requirements.

However, under this limitation, multiple exceptions will not be permitted for separate plans that reduce cost sharing for benefits pertaining to the treatment of the same chronic and high-cost condition, regardless of whether these benefits with reduced cost sharing vary between the separate plans. Thus, under this limitation, for example, if an issuer submits two exception requests for two separate plans that have reduced cost sharing for benefits pertaining to the treatment of diabetes (and both plans reduce cost sharing for insulin), only one exception would be permitted. Similarly, if an issuer submits exception requests for two separate plans with reduced cost sharing for different benefits pertaining to the treatment of diabetes (with one plan reducing cost sharing for insulin, and the other reducing cost sharing for diabetic foot care, diabetic retinal exam, and diabetic lab testing), the issuer would be permitted only one exception.

We believe adopting this approach will ensure that issuers do not offer duplicative exceptions plans with only minor differences in cost sharing, and that the exceptions process will instead encourage issuers to focus on reducing cost sharing for the most impactful benefits pertaining to the treatment of particular chronic and high-cost conditions. We believe that these exceptions will be an important way for issuers to further health equity and address pressing health needs in their service areas, and we believe that this limit will encourage issuers to focus their time and efforts on creating the strongest plan designs for these conditions as possible. We also believe this limit is congruent with existing market trends and will not impede issuers' ability to use non-standardized plan options to develop and offer the full desired scope of innovative plan designs.

Comment: Several commenters requested further clarification on the particular chronic and high-cost conditions eligible for consideration under this exceptions process.

Response: Similar to our stance in the proposed rule (88 FR 82608), we clarify that, for purposes of this standard, high-cost conditions are those that account for a disproportionately high portion of total Federal health expenditures. We note that the four chronic and high-cost conditions included in the prescription drug adverse tiering review for PY 2025 (specifically, hepatitis C virus, HIV, multiple sclerosis, and rheumatoid arthritis) are examples of conditions that we would consider to be chronic and high-cost in nature for purposes of this standard.

However, we note that we would also consider additional conditions to be chronic and high cost in nature for purposes of this standard. As we explained in the proposed rule (88 FR 82608), additional representative examples of conditions that we would consider to be chronic and high cost in nature include, but are not limited to, Alzheimer's disease, kidney disease, osteoporosis, heart disease, diabetes, and all kinds of cancer. Examples of conditions that we would not consider chronic and high cost in nature for purposes of this standard would be those that are generally acute in nature, including bronchitis, the flu, pneumonia, strep throat, and respiratory infections.

Comment: Several commenters recommended expanding the criteria considered in the exceptions process. Many commenters explained that the criteria included in the proposed exceptions process fail to consider the impact of different variations of benefit packages, provider networks, formularies, and the inclusion of telehealth services on the accessibility of services for individuals with chronic and high-cost conditions.

Several commenters thus recommended modifying the exceptions process to consider product ID, network ID instead of product network type, formulary ID, and inclusion of telehealth services. One commenter recommended expanding the exceptions process criteria to allow issuers to offer plan design options with benefits tailored to address documented health disparities in underserved communities (such as non-standardized plan options that include benefits designed to improve access to ''critical services,'' enhance the quality of care for ''critical services,'' and/or lower out-of-pocket costs for ''critical services,'' as well as provide access to wellness programs and promote native-language inclusivity to increase engagement and health literacy).

Response: While we agree that different benefit packages, provider networks, formularies, and the inclusion of telehealth services are all important factors that pertain to the treatment of chronic and high-cost conditions, we believe restricting eligibility for this exceptions process based solely on a reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions is the most appropriate approach. We believe the inclusion of those additional factors would compromise how precisely tailored the current standard is in ensuring that excepted plans indeed target the unique health care needs of consumers with high-cost and chronic conditions.

Specifically, considering these criteria in determining eligibility for an exception would allow issuers to slightly vary included provider IDs, formulary IDs, and the inclusion of telehealth services, which could result in these plans having a different product IDs, network IDs, formulary IDs and telehealth benefits while still failing to provide meaningfully different coverage between excepted plans. We do not believe that including one different provider in a plan's network, for example, should result in that plan being permitted an exception on that basis alone. We believe such an approach would weigh against our goals of reducing plan proliferation and choice overload (88 FR 82608).

In response to the commenter who recommended incorporating additional criteria to allow issuers to better address health disparities documented in underserved communities, we note that we continue to believe that the criteria that we will consider under § 156.202(d) in determining whether to grant an exception will help ensure that non-standardized plan options offered pursuant to this exceptions process are well-designed to address health disparities in underserved communities. As we explained in the proposed rule (88 FR 82608), we believe this

exceptions process could play an important role in combatting health disparities and supporting health equity. Furthermore, since we did not restrict the chronic and high-cost conditions potentially eligible for this exceptions process to a discrete list of conditions, we believe issuers will have sufficient flexibility to address health disparities in underserved communities through the exceptions process.

Relatedly, we believe that since members of underserved communities suffer from the type of chronic and high-cost conditions that may qualify an issuer for an exception at greater rates than the general population, and since this exceptions process permits issuers to offer innovative non-standardized plan options that include substantially reduced cost sharing for services related to treatment of those conditions, we believe the criteria considered under this exceptions process will improve this population's access to care and, subsequently, their health outcomes.

Finally, we note that issuers are not limited in the number of standardized plan options they can offer. Given this flexibility, issuers are permitted to offer different standardized plan options with different product IDs, network IDs, and formulary IDs, so long as they conform to the required cost-sharing parameters for these plans.

Comment: Many commenters noted the concern that permitting exceptions solely on the basis of a reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions could significantly impact risk pools and risk adjustment transfers—such as by attracting a higher number of enrollees with chronic and high-cost conditions into these plans, leading to a corresponding increase in actuarial risk insufficiently considered in the current structure and operation of HHS-operated risk adjustment program.

Response: We do not agree with commenters' concerns about the impact of these excepted plans on the risk pool and risk adjustment. First, issuers are not required to offer these excepted plans. Similar to what we explained in the proposed rule (88 FR 82608), we continue to anticipate that most issuers would determine that the burden of creating and certifying additional non-standardized plan options intended to benefit a comparatively small population of consumers would outweigh the benefit, meaning we do not anticipate a substantial number of exceptions requests. With a limited number of issuers requesting exceptions under this exceptions process, we anticipate a correspondingly limited impact on the risk pool. Second, these excepted plans are subject to the AV *de minimis* range requirements under §§ 156.140, 156.200, and 156.400, meaning issuers are limited in the extent in which they can vary allowable cost sharing within these excepted plans.

Third, if an issuer does choose to offer an excepted plan, we believe the current structure and operation of HHS-operated risk adjustment program [309] accounts for the actuarial risk associated with enrollment in these plans. This is because the chronic and high-cost conditions we anticipate issuers will target with this exception process are already accounted for in the HHS risk adjustment models under the hierarchical condition categories (HCCs) used in the models to assess an enrollee's actuarial risk,[310] and subsequent plan liability.

For example, HCC 01 (HIV/AIDS), HCC 118 (Multiple Sclerosis), and multiple HCCs for diabetes related diagnoses, HCC 19 (Diabetes with Acute Complications), HCC 20 (Diabetes with Chronic Complications), HCC 21 (Diabetes without Complication), and HCC 22 (Type 1 Diabetes Mellitus, add-on to Diabetes HCC 19–21) are payment HCCs that account for chronic and high-cost conditions targeted with this exceptions process. Therefore, we believe the current structure and operation of HHS-operated risk adjustment program sufficiently accounts for the risk that may arise from attracting a higher number of enrollees with chronic and high-cost conditions into these plans.

Lastly, these excepted plans are limited to the individual markets, and the HHS risk adjustment models are national models that are used in all States where the HHS-operated risk adjustment program applicable to the individual, small group, and merged markets is operated. These models are intended to reflect the relative national average costs for HCCs and have not been developed to account for specific State or market specific variation in plan liability. We have found, based on our experience in modeling, that the nationwide dataset is often necessary to ensure that we have adequate sample size and stability in our risk adjustment models, including the models' factors and coefficients. If an issuer offers excepted non-standardized plan options that attract a higher number of enrollees with chronic and high-cost conditions, the issuer would receive credit for the increased actuarial risk as part the risk score and transfer calculations for the applicable benefit year.

Comment: Several commenters supported maintaining the 25 percent reduction in cost sharing as the difference threshold for the proposed exceptions process. These commenters explained that reducing this cost sharing difference threshold below 25 percent would make it difficult for consumers with chronic and high-cost conditions to obtain meaningful benefit from enrolling in an excepted plan. These commenters also explained that reducing the cost sharing difference threshold would allow issuers to offer non-standardized plan options that are not meaningfully different from existing offerings, which runs counter to the goal of reducing the rate of plan proliferation.

Conversely, several commenters expressed concern with the proposed cost sharing difference threshold. These commenters noted that it would be difficult to demonstrate a 25 percent reduction in cost sharing for benefits associated with the treatment of chronic and high-cost conditions while maintaining an AV for these plans within the permissible *de minimis* range for each metal level. Several commenters thus recommended reducing the cost sharing difference threshold, such as to 10 percent, to allow issuers to submit exception requests that more easily meet the required cost sharing difference threshold under the standard.

Response: We agree that reducing the cost sharing difference threshold to less than 25 percent may make it difficult for consumers with chronic and high-cost conditions to obtain meaningful benefit from enrolling in an excepted plan. As we explained in the proposed rule (88 FR 82608), we continue to believe that the cost sharing difference threshold of 25 percent or more is appropriate since we have observed that cost sharing differences below this threshold represent normal variation within a particular metal level, while differences at or above this threshold are more often associated with cost sharing differences between different metal levels.

Altogether, we do not believe that a difference in a cost sharing amount that is of the same magnitude as normal variation within a particular metal level (specifically, less than 25 percent) would warrant being excepted from the non-standardized plan option limit. We further agree that reducing the cost sharing difference threshold to below 25 percent may allow issuers to utilize this exceptions process to offer non-

[309] Since the 2017 benefit year, HHS has operated the risk adjustment program for the individual, small group, and merged markets in all 50 States and the District of Columbia.

[310] See Tables 1 through 6 of this final rule.

standardized plans that are not meaningfully different from existing non-standardized plan offerings, which runs counter to our goal of reducing the rate of plan proliferation.

Finally, we note that it will be possible for issuers to reduce cost sharing for benefits pertaining to the treatment of a chronic and high-cost condition by at least 25 percent in these plans while maintaining AVs within the permissible *de minimis* range for each metal level, but doing so will require issuers to make deliberate and thoughtful decisions about their plan designs (such as prioritizing the benefits that will yield the greatest impact on cost sharing for the treatment of a given chronic and high-cost condition). We also believe that requiring issuers to make these deliberate and thoughtful decisions will increase the likelihood that non-standardized plan options offered under this exceptions process support our dual aims of ensuring that truly innovative plan designs that substantially benefit consumers with chronic and high-cost conditions continue to be offered and reducing the risk of plan choice overload.

Comment: Many commenters expressed concerns about our statement in the proposed rule that we anticipated requesting that issuers submit QHP applications for non-standardized plan options that exceed the two-plan limit by the QHP certification Early Bird deadline. These commenters cited difficulties incurred by issuers in designing plans that would comply with the requirements of this exceptions process in the time afforded between the publication of this final rule and the Early Bird submission deadline. Many commenters noted that constructing plans that would fulfill the exceptions process' criteria would require not only finalizing unique benefits coverage, including cost-sharing features, but would also require securing network agreements and conducting market reviews needed to bring the novel plan designs to market.

Many commenters also noted that, historically, the Early Bird submission deadline does not offer issuers sufficient time to conduct all these activities while meeting the individual market filing deadlines imposed by their respective States. Commenters explained that imposing too early a submission deadline would substantially reduce the likelihood that issuers would apply for exceptions, resulting in fewer non-standardized plan options targeting chronic and high-cost conditions being submitted for possible inclusion above the limit.

Several commenters also cited operational concerns related to interfacing with State Departments of Insurance that would make it difficult for issuers to be able to submit complete exception requests by the Early Bird deadline. In particular, many commenters noted that although it may be possible for issuers to submit exception requests by the Early Bird deadline, depending on the publication date of this final rule and related QHP certification materials, it would be difficult for State Departments of Insurance that transfer plan submission data to CMS on behalf of their respective issuers to do so prior to the Early Bird submission deadline.

This is because issuers in some States are required to first submit plan data to their State Department of Insurance before the State Department of Insurance transfers the plan submission data to CMS. This process may take several weeks to complete from beginning to end, which would effectively require issuers to submit complete plan portfolios—including these exception requests—to their State Departments of Insurance several weeks in advance of the Early Bird deadline, possibly only several weeks after the Payment Notice is published. Accordingly, some commenters do not believe that it is feasible for State Departments of Insurance that transfer plan submission data to CMS on behalf of their respective issuers to do so prior to the Early Bird submission deadline.

Several commenters suggested alternatives to requiring issuers to submit QHP applications for non-standardized plan options that exceed the two-plan limit by the QHP certification Early Bird deadline. One commenter recommended that exception requests be approved or rejected in concept by CMS prior to the formal submission of the complete QHP certification application by the Initial Application Deadline. The commenter suggested that this approach would mitigate any operational burden imposed on the issuer while reducing the risks associated with coordinating with State Departments of Insurance and managing varying filing deadlines (such as issuers being unable to submit complete plan portfolios and exception requests to their State Departments of Insurance in advance of the Early Bird deadline). The commenter stated this approach would also allow CMS to provide feedback on the proposed excepted plan, helping to circumvent any quality assurance challenges (such as issuers formally submitting exception requests that do not meet the requirements of the exceptions process).

Response: We acknowledge the commenters' concerns with requesting that issuers submit QHP applications, including exception requests, for non-standardized plan options that exceed the two-plan limit by the QHP certification Early Bird deadline, and we agree with many of the points commenters made. Specifically, we agree that it would be difficult for issuers to compile a complete portfolio of plans, as well as related exception requests, only several weeks after the publication of the final rule in order to transfer this data to their State Departments of Insurance sufficiently in advance of the Early Bird deadline. We also agree that the Early Bird submission deadline may not offer issuers sufficient time to conduct all required activities while meeting the individual market filing deadlines imposed by their respective States.

As such, we anticipate that the exception request submission deadline for issuers will be the Initial Application Deadline for QHP certification, aligning the exception request submission deadline with the Initial Application Deadline for QHP certification applications for standardized and non-standardized plan option offerings. We note that the Initial Application Deadline for QHP certification for each plan year will continue to be communicated in sub-regulatory guidance. We believe adopting this approach will permit issuers sufficient time to finalize unique benefits coverage and cost sharing, secure network agreements, and conduct market reviews necessary to bring these novel plan designs to the market in a feasible timeframe. We also believe that adopting this approach obviates the need for CMS to approve or reject exception request materials in advance of the deadline for submitting a complete QHP certification application.

Comment: Several commenters suggested that interested parties should be given the opportunity to review and provide feedback on the application materials and justification forms.

Response: We agree that providing interested parties the opportunity to review and provide feedback on the exception request form is critical to ensuring the success of the implementation of this exceptions process. As such, we note that interested parties had the opportunity to review these materials in the 60-day PRA package associated with this rule

(CMS–10878).[311] We encourage interested parties to review any future iterations of such materials in subsequent PRA packages when they are published. Finally, we note that we intend to solicit feedback on these forms in future interested party listening sessions.

Comment: Some commenters suggested that the proposed exceptions process be accompanied by additional functionalities on *HealthCare.gov* and DE entity non-Exchange websites to enable consumers to more easily identify non-standardized plan options that offer specialized cost sharing offerings intended to benefit the treatment of the corresponding chronic and high-cost conditions. Other commenters noted that differential display for non-standardized plan options that are offered pursuant to the exceptions process may confuse or overwhelm consumers with information that is not meaningful to them.

One commenter recommended imposing restrictions on mentioning specific chronic and high-cost conditions in the plan marketing names of non-excepted plans. The commenter noted that currently available QHPs that are marketed as being uniquely relevant to a certain chronic and high-cost condition may not actually provide substantial benefits to individuals seeking treatment for that condition. The commenter suggested that some plans with references to diabetes in their planned marketing names may fail to substantially reduce cost sharing for benefits related to diabetes treatment, for example. The commenter stated that, therefore, issuers should not be permitted to display a plan marketing name that markets a non-excepted QHP as if it had been approved under this exceptions process.

Response: We intend to explore the benefit and feasibility of requiring some form of visual differentiation of these excepted plans in the form of differential display on *HealthCare.gov,* in conjunction with our continued work on choice architecture. We will also consider whether any future differential display requirements related to excepted plans should also apply to DE entity non-Exchange websites. At this time, we are not finalizing any requirements for excepted or non-excepted plans related to particular plan marketing names, since both excepted and non-excepted plans are already subject to the plan marketing name requirements at § 156.225. We encourage issuers offering excepted plans to adopt plan marketing names that reflect the chronic and high-cost condition for which the plan offers substantially reduced cost sharing, if so desired.

Comment: Several commenters requested clarification on the interaction between the reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions, deductibles, and annual limitations on cost sharing. Several commenters also requested clarification of how a 25 percent reduction in cost sharing for benefits pertaining to the treatment of a chronic and high-cost condition would be evaluated under this exceptions process.

Response: We clarify that deductibles and annual limitations on cost sharing (as well as their interactions with copayments and coinsurance rates) will be considered when evaluating the 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions under this exceptions process. We believe that excluding deductibles and annual limitations on cost sharing from consideration when evaluating the difference in cost sharing for relevant benefits would make accurate comparisons between the in-limit non-standardized plan option the issuer is using as a baseline and the non-standardized plan option the issuer is requesting to be excepted more difficult, since the cost sharing type (specifically, coinsurance rate or copayment subject to or exempt from the deductible) for the same benefit may differ between plans.

For example, without considering deductibles and annual limitations on cost sharing and their interactions with coinsurance rates and copayments when evaluating the 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions under this exceptions process, it would be difficult to assess whether the required reduction in cost sharing is achieved if the in-limit non-standardized plan option the issuer is using as a comparison has a coinsurance rate of 50 percent subject to the deductible as the form of cost sharing for a particular benefit, whereas the corresponding benefit in the non-standardized plan option the issuer requests to be excepted has a copayment of $30 exempt from the deductible as the form of cost sharing. It would similarly be difficult to assess whether the required reduction in cost sharing is achieved if the two plans have different deductibles and/or annual limitations on cost sharing.

We also clarify that under new § 156.202(d)(1), a 25 percent reduction in cost sharing for benefits pertaining to the treatment of a chronic and high-cost condition will not be evaluated at the individual benefit level, but will instead be evaluated at the level of total out-of-pocket costs for the treatment of the particular chronic and high-cost condition for a population of enrollees with that particular chronic and high-cost condition.

This is because if we were to adopt an approach that evaluated this difference in cost sharing at the individual benefit level, issuers may reduce cost sharing for only one or several already relatively inexpensive or infrequently utilized benefits—which may technically meet the required difference in cost sharing threshold under the standard but may not actually meaningfully reduce cost sharing for enrollees with that chronic and high-cost condition. For example, if this difference in cost sharing were evaluated at the individual benefit category level, an issuer would be able to reduce cost sharing for a particular prescription drug used to treat a chronic and high-cost condition from a $20 copay exempt from the deductible to a $15 copay exempt from the deductible to meet the required cost sharing difference threshold under the standard. We do not believe this reduction in cost sharing would substantially benefit consumers with the relevant chronic and high-cost condition.

Thus, we believe evaluating the required difference in cost sharing at the level of total out-of-pocket costs for the treatment of the chronic and high-cost condition for a population of enrollees with the relevant chronic and high-cost condition represents a more comprehensive and holistic approach in ensuring that excepted plans substantially benefit consumers with chronic and high-cost conditions. As we explained in the proposed rule (88 FR 82607), one of our goals with the proposed exceptions process is to ensure that excepted plans substantially benefit consumers with chronic and high-cost conditions.

Consider the following hypothetical scenario as an illustration of how the 25 percent reduction in cost sharing for benefits pertaining to the treatment of a chronic and high-cost condition will be evaluated. In this scenario, an issuer desires to offer two non-standardized plan options per product network type, metal level, and inclusion of dental and/or vision benefit coverage. This issuer also desires to submit an exception request for an additional non-standardized plan option that reduces cost sharing for benefits pertaining to

[311] *https://www.cms.gov/medicare/regulations-guidance/legislation/paperwork-reduction-act-1995/pra-listing/cms-10878.*

the treatment of diabetes. As part of the request for the additional non-standardized plan option to be excepted, the issuer chooses one of its non-standardized plan options within the limit of two for PY 2025 in the same product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area to serve as a point of comparison. The issuer will utilize one of these non-standardized plan options within the limit of two for PY 2025 as the comparison for evaluating whether the required 25 percent reduction in cost sharing is achieved relative to the plan the issuer is requesting to except from the non-standardized plan option limit.

The cost sharing structure in the non-standardized plan option the issuer has chosen as the in-limit comparison includes a $40 copayment exempt from the deductible for each primary care visit, an $80 copayment exempt from the deductible for each podiatrist specialist visit, an $80 copayment exempt from the deductible for each ophthalmologist specialist visit, and a 40 percent coinsurance rate exempt from the deductible for each utilization of laboratory services. The cost sharing structure in the non-standardized plan option that the issuer requests be excepted from the limit includes a $20 copayment exempt from the deductible for each primary care visit, a $70 copayment exempt from the deductible for each podiatrist visit, a $70 copayment exempt from the deductible for each ophthalmologist visit, and a 20 percent coinsurance rate exempt from the deductible for each utilization of laboratory services, with the cost sharing for all other benefits remaining the same between both plans.

Under this exceptions process, the 25 percent reduction in cost sharing for benefits pertaining to the treatment of a chronic and high-cost condition will not be evaluated at the individual benefit category level (in this case, primary care visit, podiatrist specialist visit, ophthalmologist specialist visit, and laboratory services) between the in-limit non-standardized plan option the issuer is using as a point of comparison and the additional non-standardized plan option the issuer is requesting to have excepted from the limit. Rather, the required reduction in cost sharing will be evaluated at the level of total out-of-pocket costs for a representative treatment scenario for the relevant chronic and high-cost condition. In this hypothetical scenario, for example, a representative treatment scenario for the treatment of diabetes is comprised of four primary care visits, one podiatrist specialist visit, one ophthalmologist specialist visit, and the utilization of laboratory services one time.

Under the cost sharing structure in the non-standardized plan option the issuer has chosen as an in-limit point of comparison, this representative treatment scenario would result in the enrollee paying the $40 copayment exempt from the deductible for a primary care visit four times, amounting to $160; the $80 copayment exempt from the deductible for a podiatrist specialist visit one time; the $80 copayment exempt from the deductible for an ophthalmologist specialist visit one time; and, assuming a total cost of $200 for each utilization of laboratory services and a coinsurance rate of 40 percent exempt from the deductible for this service, one utilization of laboratory services amounting to $80. Altogether, the total out-of-pocket costs for this representative treatment scenario under the cost-sharing structure in the non-standardized plan option the issuer has chosen as an in-limit point of comparison would amount to $400.

Under the cost sharing structure in the non-standardized plan option that the issuer requests be excepted from the limit, the representative treatment scenario would result in the enrollee paying the $20 copayment exempt from the deductible for a primary care visit four times, amounting to $80; the $70 copayment exempt from the deductible for a podiatrist specialist visit one time; the $70 copayment exempt from the deductible for an ophthalmologist specialist visit one time; and, assuming a total cost of laboratory services of $200 for each utilization of laboratory services and a coinsurance rate of 20 percent exempt from the deductible for this service, one utilization of laboratory services amounting to $40. Altogether, the total out-of-pocket costs for this representative treatment scenario under the cost-sharing structure in the non-standardized plan option the issuer is requesting to be excepted from the limit would amount to $260.

Thus, although there is not necessarily a 25 percent reduction when comparing each individual benefit category between these two plans, the standard would still be satisfied, so long as the overall cost sharing (in the form of total out-of-pocket costs, which takes into consideration maximum out-of-pocket limitations and deductibles) for a population of enrollees with diabetes will still be reduced by at least 25 percent under the excepted non-standardized plan option (which in this case would be $260) compared to the non-standardized plan option being used as an in-limit point of comparison (which in this case would be $400). We note that an issuer seeking to utilize this exceptions process must demonstrate underlying actuarial assumptions in the required actuarial memorandum (which includes corresponding actuarial attestation) as part of the exception request that we explain later in this section of this final rule.

We are also making several changes to the requirements related to the written justification form that issuers will be required to submit to utilize this exceptions process at § 156.202(e)(1) through (3), to more accurately reflect how the reduction in cost sharing will be evaluated under this exceptions process and ensure that excepted non-standardized plan options have specific design features that will substantially benefit consumers with chronic and high-cost conditions, a goal we explained in the proposed rule (88 FR 82606). We also introduced new paragraph (4) to ensure that the form issuers submit adequately explains the underlying actuarial assumptions made in designing the proposed excepted plan.

In particular, under proposed § 156.202(e)(1), an issuer seeking to utilize this exception request process would have been required to identify the specific condition(s) for which cost sharing is reduced. However, under finalized § 156.202(e)(1), an issuer seeking to utilize this exceptions request process must identify the specific chronic and high-cost condition that their additional non-standardized plan option offers substantially reduced cost sharing for, in accordance with the definition of ''cost sharing'' at § 156.20.

We made this change to reflect the fact that each excepted non-standardized plan option should be tailored to the treatment of one chronic and high-cost condition, since we believe it will be both difficult and impractical for issuers to reduce cost sharing for benefits pertaining to the treatment of two or more chronic and high-cost conditions while maintaining AVs within the permissible *de minimis* range for each metal level within the same excepted plan design. This is because the required cost sharing reduction is 25 percent, and for an issuer to reduce the treatment-specific cost sharing for the treatment of two separate chronic and high-cost conditions within the same plan design would likely result in that plan having an AV exceeding the permissible *de minimis* range, or at least having an AV that would render the plan costly and uncompetitive at a minimum.

Under proposed § 156.202(e)(2), an issuer seeking to utilize this exception request would have been required to

explain which benefit(s) would have reduced annual enrollee cost sharing (as opposed to reduced cost sharing for a limited number of visits) for the treatment of the specified condition(s) relative to the same corresponding benefits in an issuer's other non-standardized plan offerings in the same product network type, metal level, and service area. However, this requirement would not have enabled accurate assessment of whether an excepted plan reduces cost sharing at the level of total out-of-pocket costs for the treatment of a particular chronic and high-cost condition, in accordance with § 156.202(d)(1).

As such, under finalized § 156.202(e)(2), an issuer seeking to utilize this exceptions process must identify which specific benefits in the Plans and Benefits Template are discounted to provide reduced treatment-specific cost sharing for individuals with the specified chronic and high-cost condition. These discounts must be relative to the treatment-specific cost sharing for the same corresponding benefits in the issuer's other non-standardized plan option offerings in the same product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area.

For the purposes of this standard, ''treatment specific cost sharing'' consists of the costs for obtaining services that pertain to the treatment of a particular chronic and high-cost disease—but not the costs for obtaining services that do not pertain to the treatment of the relevant condition. For example, costs for obtaining chemotherapy would not be considered treatment-specific cost sharing for a plan designed to address diabetes for the purposes of this standard. However, as an additional clarifying example, a primary care visit would pertain to the treatment of the diabetes to the extent that this visit entails the treatment of the relevant condition.

We also clarified in this paragraph (e)(2) that the issuer must identify all services for which the benefits substantially reduce cost sharing in the Plans and Benefits Template. These benefits must encompass a complete list of relevant services pertaining to the treatment of the relevant condition. For example, if an issuer intends to offer a plan that is designed to address diabetes, the issuer should list only the benefits with reduced cost sharing for services pertaining to the treatment of diabetes. We made these modifications to ensure that the written justification that issuers will be required to submit as part of this exceptions process accurately explains how the excepted plan substantially reduces cost sharing at the level of total out-of-pocket costs for the treatment of a particular chronic and high-cost condition, in accordance with § 156.202(d)(1).

Under proposed § 156.202(e)(3), an issuer seeking to utilize this exceptions process would have been required to explain how the reduced cost sharing for these benefits pertain to clinically indicated guidelines for treatment of the specified chronic and high-cost condition(s). However, under finalized § 156.202(e)(3), an issuer seeking to utilize this exceptions process must explain how the reduced cost sharing for these services pertains to clinically indicated guidelines and a representative treatment scenario for treatment of the specified chronic and high-cost condition. We also clarified in this paragraph that the issuer must include any relevant studies, guidelines, or supplementary documents to support the application, as applicable. In addition, we clarified in this paragraph that for purposes of this standard, a representative treatment scenario is an annual course of treatment for a chronic and high-cost condition (for example, osteoporosis, diabetes, cancer).

We made this modification to ensure that each excepted non-standardized plan option is tailored to the treatment of one chronic and high-cost condition. We also made this modification to ensure that issuers would not be able to simply reduce cost sharing for one already relatively inexpensive or relatively infrequently utilized service by 25 percent or more to meet the standard, which could result in the plan failing to substantially benefit consumers with a chronic and high-cost condition. Instead, under the final requirement in this paragraph, issuers will be required to reduce cost sharing for a representative treatment scenario in order to reduce cost sharing for the treatment of that particular condition by 25 percent or more, which we believe ensures the plan would substantially benefit consumers with the relevant chronic and high-cost condition.

We also finalized new § 156.202(e)(4) requiring that issuers include a corresponding actuarial memorandum that explains the underlying actuarial assumptions made in the design of the plan the issuer is requesting to except. In this memorandum, an issuer must demonstrate how the benefits that are discounted to provide reduced treatment-specific cost sharing of at least 25 percent identified at § 156.202(e)(2) for the treatment of the condition identified at § 156.202(e)(1) under the excepted plan compare to the identified in-limit offering in the same product network type, metal level, inclusion of dental and/or vision coverage, and service area.

We also clarified in this paragraph that this demonstration must specifically be in reference to the specific population that would be seeking treatment for the relevant condition and not the general population. We also clarified that this memorandum also must include an actuarial opinion confirming that this analysis was prepared in accordance with the appropriate Actuarial Standards of Practice and the profession's Code of Professional Conduct. We made these modifications to ensure issuers' exception requests accurately explain how the excepted plans substantially reduce cost sharing at the level of total cost sharing for the treatment of a particular chronic and high cost condition, which enables the assessment of whether the required difference in cost sharing is achieved in accordance with § 156.202(d)(1).

Comment: Several commenters requested clarification of how the cost sharing difference threshold applies when there is no cost sharing for a benefit under the in-limit non-standardized plan option the issuer is comparing against. These commenters noted that it is impossible to reduce cost sharing for a benefit in the excepted non-standardized plan option if the in-limit non-standardized plan option being utilized as a comparison already offers that benefit at no cost. These commenters recommended requiring that any proposed excepted non-standardized plan options being compared to an in-limit non-standardized plan option that offers a given benefit at no cost to the consumer also offer that benefit at no cost to the consumer.

Response: We acknowledge this concern, and we believe the approach we are adopting in which we evaluate the 25 percent reduction in cost sharing at the level of total out-of-pocket costs for benefits pertaining to the treatment of the particular chronic and high-cost condition for a population of enrollees with the particular chronic and high-cost condition—instead of evaluating the reduction in cost sharing at the individual benefit category level—sufficiently mitigates this concern.

This modification avoids requirements on issuers that would be unworkable, such as requiring the issuer to further reduce the cost sharing for a particular benefit in the excepted non-standardized plan option when there is no cost sharing for the benefit in the in-limit non-standardized plan option. For

example, if there is no cost sharing for primary care visits in the in-limit non-standardized plan option being utilized as a comparison, and there is similarly no cost sharing for primary care visits in the non-standardized plan option the issuer is requesting to be excepted, it would be impossible for the issuer to further reduce cost sharing for this benefit category in the excepted plan. However, so long as the total out-of-pocket costs for benefits pertaining to the treatment of the particular chronic and high-cost condition are reduced by 25 percent or more, the standard would be satisfied.

Comment: Several commenters recommended that the cost sharing difference threshold only be applied to the standard variant of the plan for which the issuer is seeking an exception and not to the income-based cost sharing reduction (CSR) variants or American Indian (AI)/Alaska Native (AN) limited or zero cost share variants. The commenter noted that it would be difficult for issuers to design plans with the necessary reduction in cost sharing in these plan variants while maintaining AVs within the permissible *de minimis* ranges due to the restricted *de minimis* ranges for these plan variants.

Response: We agree it would be difficult to reduce cost sharing by 25 percent for benefits pertaining to the treatment of chronic and high-cost conditions in the more generous income-based CSR variants and the AI/AN limited or zero cost share variants of excepted plans, due to the restricted AV *de minimis* range of these plans. This is because under the definition of ''*de minimis* variation for a silver plan variation'' at § 156.400, there is a −0 percentage point and +1 percentage point allowable AV *de minimis* variation for these plans—compared to a permissible AV *de minimis* variation of −2 percentage points and +2 percentage points for standard variants under § 156.140(c)(2), and a permissible AV *de minimis* range of −0 percentage points and +2 percentage points for individual market silver QHPs under § 156.200(b)(3).

Furthermore, since the AI/AN zero cost share variant at § 156.420(b)(1) eliminates cost sharing for all services, while the AI/AN limited cost share variant at § 156.420(b)(2) eliminates cost sharing on any item or service that is an EHB furnished directly by the Indian Health Service, an Indian Tribe, Tribal Organization, or Urban Indian Organization (each as defined in 25 U.S.C. 1603), or through referral under contract health services, cost sharing cannot be further reduced.

As such, we are finalizing at § 156.202(d)(4) that the reduced cost sharing requirement that excepted plans must meet only applies to the standard variant of the plan for which the issuer is seeking exception, and not to the income-based CSR plan variations required by § 156.420(a) or the zero and limited cost sharing plan variations required by § 156.420(b). We are making this change to ensure that issuers can achieve the required reduction in cost sharing between the non-standardized plan option the issuer chooses as an in-limit comparison and the non-standardized plan option the issuer requests to be excepted.

Comment: Several commenters requested additional clarification on how the proposed exceptions process would comply with existing guidance under the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA).

Response: In general, MHPAEA and its implementing regulations apply to group health plans and health insurance issuers offering group or individual health insurance coverage that provide both medical and surgical benefits and mental health or substance use disorder benefits and require, in relevant part, that the financial requirements (such as coinsurance and copayments) and treatment limitations (such as visit limits) imposed on mental health or substance use disorder benefits cannot be more restrictive than the predominant financial requirements and treatment limitations that apply to substantially all medical/surgical benefits in the same classification.[312]

The regulations under MHPAEA set forth six classifications of benefits for applying the parity rules for financial requirements and treatment limitations.[313] Under MHPAEA regulations, a type of financial requirement or quantitative treatment limitation is considered to apply to substantially all medical/surgical benefits in a classification if it applies to at least two-thirds of all medical/surgical benefits in the classification. If a type of financial requirement or treatment limitation does not apply to at least two-thirds of medical/surgical benefits in a classification, it cannot apply to mental health or substance use disorder benefits in that classification. If the type of requirement or limitation does apply to at least two-thirds of medical/surgical benefits in a classification, the predominant level that may be applied to mental health or substance use disorder benefits in the classification is the one that applies to more than one half of medical/surgical benefits within the classification subject to the financial requirement or treatment limitation.[314] The determination of the portion of medical/surgical benefits subject to the financial requirement or treatment limitation is based on the dollar amount of all plan payments for medical/surgical benefits in the classification expected to be paid under the plan for the plan year.

QHP issuers seeking to reduce cost sharing in non-standardized plans under the exceptions process will need to carefully evaluate whether and how designing a plan with reduced cost sharing for certain chronic or high-cost conditions can be achieved consistent with MHPAEA and its implementing regulations. Depending on the extent to which reducing cost sharing for medical/surgical benefits in a benefit classification (or any other design feature of the excepted plan) affects the results of the substantially all/predominant analysis under MHPAEA, the QHP issuer may not be permitted to impose the cost-sharing (or other unique) requirement on mental health or substance use disorder benefits in that classification, or may be required to reduce cost sharing for mental health and substance use disorder benefits in the classification, to ensure compliance with MHPAEA. Further, the issuer must comply in all other regards with applicable requirements under MHPAEA and its implementing regulations.

Comment: Several commenters requested further clarification on how the excepted plan designs would be consistent with the nondiscrimination standards, including the EHB non-discrimination standards at § 156.125.

Response: As we explained in the proposed rule (88 FR 86208 through 88

[312] Section 9812 of the Code, section 712 of ERISA, and section 2726 of the PHS Act. 26 CFR 54.9812–1, 29 CFR 2590.712, and 45 CFR 146.136 and 147.160.

[313] The six classifications of benefits are (1) inpatient, in-network; (2) inpatient, out-of-network; (3) outpatient, in-network; (3) outpatient, out-of-network; (4) emergency care; and (6) prescriptions drugs. In addition, sub-classifications are permitted for office visits, separate from other outpatient services. 26 CFR 54.9812–1(c)(2)(ii) and (c)(3)(iii); 29 CFR 2590.712(c)(2)(ii) and (c)(3)(iii); and 45 CFR 146.136(c)(2)(ii) and (c)(3)(iii).

[314] If no single level applies to more than one-half of medical/surgical benefits subject to a financial requirement or quantitative treatment limitation in a classification, the plan or issuer may combine levels until the combination of levels applies to more than one-half of medical/surgical benefits subject to the financial requirement or quantitative treatment limitation in the classification. The least restrictive level within the combination is considered the predominant level of that type in the classification. 26 CFR 54.9812–1(c)(3)(i)(B), 29 CFR 2590.712(c)(3)(i)(B), and 45 CFR 146.136(c)(3)(i)(B).

FR 86209), if additional plans are permitted to be offered exceeding the limit of two non-standardized plan options, in accordance with the guaranteed availability requirements at § 147.104(a), these plans will also be required to be made available on the same basis to consumers without these chronic and high-cost conditions. Further, we emphasize that these plans will be prohibited from discriminating in accordance with the nondiscrimination requirements at §§ 147.104(e), 156.125, and 156.200(e). To meet these nondiscrimination requirements, these plans will be required to apply reductions in cost sharing to all enrolled in the plan, without regard to diagnosis. Furthermore, although we acknowledge that non-standardized plan options excepted under this proposal will primarily benefit consumers with chronic and high-cost conditions, we believe that a sufficiently satisfactory range of both non-standardized and standardized plan options currently exist that are primarily intended for consumers without chronic and high-cost conditions. As a result, we are not concerned that any risk of discrimination created by this exceptions process will negatively impact consumers, including but not limited to consumers with chronic and high-cost conditions.

Comment: Several commenters requested clarification on how enrollees affected by plan discontinuations arising from the reduction of the non-standardized plan option limit at § 156.202(b) will be re-enrolled into new plans.

Response: Similar to what we explained in the 2024 Payment Notice (88 FR 25856), we will continue to utilize the existing discontinuation notices and process as well as the current re- enrollment hierarchy at § 155.335(j) to ensure a seamless transition and continuity of coverage for enrollees affected by discontinuations.

8. CO–OP Loan Terms (§ 156.520)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82609), we proposed to amend § 156.520(f) to enable CMS to approve requests by CO–OP borrowers to voluntarily terminate their loan agreement with CMS, and thereby cease to constitute a qualified non-profit health insurance issuer (QNHII),[315] for the purpose of permitting the loan recipient to pursue innovative business plans that are not otherwise consistent with the governance requirements and business standards applicable to a CO–OP borrower, provided certain conditions are met as described in this section.

Section 1322 of the ACA requires a CO–OP loan recipient, or qualified nonprofit health insurance issuer (QNHII), to be, among other things, an entity ''substantially all of the activities of which consist of the issuance of qualified health plans in the individual and small group markets in each State in which it is licensed to issue such plans.'' [316] This requirement is set forth in regulations which require that at least two-thirds of the policies or contracts for health insurance coverage issued by a CO–OP in each State in which it is licensed be qualified health plans offered in the individual and small group markets.[317]

The ACA also mandates that a QNHII be subject to governance by ''a majority vote of its members.'' [318] Accordingly, § 156.515(b) imposes governance requirements for each CO–OP that include a requirement that the entity remain under member control, such that a majority of its directors are elected by a majority vote of the CO–OP's members. A CO–OP ''member'' is an individual covered by a health insurance policy issued by a CO–OP.[319] A CO–OP's voting members consist of all persons covered by health insurance policies issued by the CO–OP who are 18 years of age or older.[320]

Section 1322 of the ACA mandates that the Secretary require an entity receiving a CO–OP loan to enter into a loan agreement with the Secretary. The required loan agreement must obligate the borrower to ''meet, and to continue to meet'' the requirements of a QNHII, and ''any other requirements contained in the agreement.'' [321] No more is specified concerning the required contents of the loan agreement.[322] The requirement that a CO–OP be subject to a majority vote of its members is, accordingly, imposed by regulation, at § 156.515(b), as well as the CO–OP loan agreement. Specifically, Section 18.2 of the CO–OP loan agreement prohibits any ''[o]rganizational [c]hange . . . that would result in . . . implementing a governance structure that does not meet the governance standards codified at 45 CFR 156.515(b).''

We explained in the proposed rule that as a result of these requirements, a CO–OP cannot pursue new business arrangements that would impose a governance structure under which it is possible for a majority of directors to be elected by a majority vote of persons who are not covered by health insurance policies issued by the CO–OP. We further explained that a CO–OP also cannot enter into new business arrangements under which voting members need not be individuals covered by policies issued by the CO–OP. We stated that it is also not possible for a CO–OP to enter into a business plan under which potentially less than two-thirds of the company's activities may consist of issuing qualified health plans.

In the proposed rule, we explained that the loan agreements currently in force only permit a CO–OP to initiate voluntary termination of its loan agreement on grounds that the loan recipient believes that it cannot create a viable and sustainable CO–OP.[323] We noted that the inability to create a viable or sustainable CO–OP would consist of a failure to become or remain licensed as a health insurance company, a failure to qualify as a QHP issuer, or a failure to become or remain financially solvent. We explained that there is no avenue currently for a CO–OP to request to terminate its loan agreement for the purpose of pursuing new business ventures that involve a governance structure or business model inconsistent with CO–OP governance or operational standards.

We stated that, informed by 8 years of experience with business operations for the CO–OP program, we have become aware of opportunities that may be available to CO–OPs to terminate their loan agreement, cease to constitute a QNHII, and thus become able to pursue new opportunities that appear well-calculated to expand operations from regional areas within a State to Statewide operations, and also improve consumer access to other health insurance products, while remaining a non-profit, member-focused entity.

We therefore proposed to amend § 156.520(f) to add § 156.520(f)(2) which would enable CMS, in its sole discretion, to approve requests by CO–OP borrowers to voluntarily terminate their loan agreement with CMS, and thereby cease to constitute a QNHII, for the purpose of permitting the loan recipient to pursue innovative business plans that are not otherwise consistent

[315] Section 1322 (c)(1)(B) of the ACA and 42 U.S.C. 18042(c)(1)(B) define a QNHII.

[316] 42 U.S.C. 18042(c)(1)(B).

[317] See § 156.515(c)(1).

[318] ACA section 1322(c)(3)(A); 42 U.S.C. 18042(c)(3)(A).

[319] See § 156.505.

[320] See § 156.515(b)(1).

[321] 42 U.S.C. 18042(b)(2)(C).

[322] 42 U.S.C. 18042(b)(2)(C)(iii) contains specific prohibitions, and concomitant penalty, that are not relevant here.

[323] CO–OP loan agreement, section 16.1.1(a).

with the governance requirements and business standards of a CO–OP borrower, provided that (1) all outstanding CO–OP loans issued to the loan recipient are repaid in full prior to termination of the loan agreement, and (2) we believe granting the request would meaningfully enhance consumer access to quality, affordable, member-focused, non-profit health care options in affected markets. We proposed to move the current regulation text at § 156.520(f) to new § 156.520(f)(1).

As a general matter, we anticipated that plans could be deemed innovative and likely to enhance consumer access to quality, affordable, member-focused health care if they appear to be well-calculated to lead directly to marketing non-profit, member-focused health plans in new regions of a State, or to offer health plans on a Statewide basis for the first time, or to expand operations into new States, or to enhance consumer access to new non-profit products that are not qualified health plans. We noted that these examples of innovative business plans are illustrative, and not exclusive.

After consideration of comments, and for the reasons outlined in the proposed rule and our responses to comments below, we are finalizing this provision as proposed. We summarize and respond below to public comments received on the proposed amendments § 156.520(f).

Comment: Three commenters expressed support for the proposal to revise CO–OP regulations to permit CO–OP loan recipients to seek voluntary termination for the purpose of pursuing business opportunities that would not otherwise be available to a CO–OP. The commenters believed the proposal, if finalized, would potentially benefit consumers by improving access to non-profit, member-focused health care options in affected markets. One commenter acknowledged the proposal but did not articulate any position.

Response: We agree with commenters who believe the proposal could benefit consumers by making available potential business opportunities that can benefit consumers and are not otherwise feasible for a CO–OP to consider.

Comment: One commenter expressed uncertainty as to whether the proposal could have significant impact, since only three CO–OPs remain in operation.

Response: We acknowledge that three CO–OPs remain, operating across five States. Efforts to expand operations within a State, and to expand operations to new States, depend on several factors. While it is true that the population affected by the proposed regulation is limited in the near-term, its impact over time could be significant since it will remove certain obstacles to business opportunities that could ultimately impact many consumers by improving access to non-profit, member-focused health care options.

9. Conforming Amendment to Netting Regulation To Include Federal IDR Administrative Fees (§ 156.1215)

In the HHS Notice of Benefit and Payment Parameters for 2025 proposed rule (88 FR 82510, 82610), we proposed conforming amendments to the payment and collections process set forth at § 156.1215 to align with the policies and regulations proposed in the Federal Independent Dispute Resolution Operations proposed rules (88 FR 75744). We proposed that the administrative fees for utilizing the No Surprises Act [324] Federal IDR process charged to health insurance issuers that participate in financial programs under the ACA would be subject to netting as part of HHS' integrated monthly payment and collections cycle, assuming the policies related to HHS collection of the IDR administrative fees in the Federal Independent Dispute Resolution Operations proposed rules (88 FR 75744) are finalized.[325]

To implement this policy, we proposed to amend § 156.1215(b) to allow HHS to net payments owed to issuers and their affiliates [326] operating under the same tax identification number (TIN) against amounts due to the Federal Government from the issuers and their affiliates operating under the same TIN for APTC, advance payments of and reconciliation of CSRs (as applicable), payment of FFE or SBE–FP user fees, HHS risk adjustment, reinsurance, and risk corridors payments and charges, and administrative fees from these issuers and their affiliates for utilizing the Federal IDR process in accordance with § 149.510(d)(2). Additionally, we proposed to amend § 156.1215(c) to provide that any amount owed to the Federal Government by an issuer and its affiliates for unpaid administrative fees due to the Federal Government from these issuers and their affiliates for utilizing the Federal IDR process in accordance with § 149.510(d)(2), after HHS nets amounts owed by the Federal Government under these programs, would be the basis for calculating a debt owed to the Federal Government.

We sought comment on the proposed amendments to § 156.1215(b) and (c).

After consideration of comments and for the reasons outlined in the proposed rule and our responses to the comments, we are finalizing this provision as proposed. We summarize and respond below to public comments received on the proposed amendments to the payment and collections process at § 156.1215(b) and (c).

Comment: Some commenters opposed the proposal to allow HHS to net unpaid Federal IDR administrative fees with payments owed to issuers for certain other specified HHS ACA programs. Several of these commenters raised concerns regarding the proposal's impact on the current integrated payment and collections processes with a few of these commenters expressing concerns that modifying any payment and collections process prior to stabilizing the Federal IDR process could create substantial administrative burdens and unintended challenges for issuers. Additionally, some commenters expressed concern that without detailed accounting from HHS, netting would hinder issuers' ability to determine which disputes the administrative fee is being collected for and to which entities, who are involved in a dispute, the IDR administrative fee should be attributed. Finally, one commenter requested the netting process be delayed until issuers are required to pay the Federal IDR administrative fee directly to HHS.

Response: We are finalizing amendments to the payment and collections process set forth at § 156.1215 as proposed. We will not begin netting Federal IDR administrative fees until disputing parties are required to pay Federal IDR administrative fees directly to HHS, if the proposal in Federal Independent Dispute Resolution Operations proposed rules (88 FR 75744) is finalized.

[324] The Consolidated Appropriations Act, 2021 (CAA) was enacted on December 27, 2020. Both title I, also known as the No Surprises Act, and title II (Transparency) of Division BB of the CAA amended chapter 100 of the Code, Part 7 of ERISA, and title XXVII of the PHS Act. Administrative fees are charged in accordance with 45 CFR 149.510(d)(2), 26 CFR 54.9816–8T(d)(2), and 29 CFR 2590.716–8(d)(2).

[325] We stated in the 2025 Payment Notice proposed rule (88 FR 82610) that the effective date of any finalized proposal related to netting of amounts owed to the Federal Government from health insurance issuers for administrative fees for utilizing the No Surprises Act Federal IDR process would not be earlier than a time at which both the proposals related to the manner of administrative fee collection and netting proposed in the Federal Independent Dispute Resolution Operations proposed rule and the proposed amendments to § 156.1215 in this proposed rule are finalized.

[326] ''Affiliate'' refers to any affiliated issuer that operates under the same taxpayer identification number as an issuer, such as when there are multiple Health Insurance Oversight System (HIOS) identifiers operating under the same taxpayer identification number. See the 2015 Payment Notice proposed rule (78 FR 72371).

To further explain this netting process, HHS will include amounts owed to the Federal Government from issuers and their affiliates operating under the same TIN for administrative fees for utilizing the Federal IDR process in accordance with § 149.510(d)(2) when netting payments owed to issuers and their affiliates operating under the same tax identification number against amounts due to the Federal Government from the issuers and their affiliates under the same taxpayer identification number for advance payments of the premium tax credit, advance payments of and reconciliation of cost-sharing reductions, payment of Federally-facilitated Exchange user fees, payment of State Exchanges utilizing the Federal platform user fees, and risk adjustment, reinsurance, and risk corridors payments and charges.

As part of this netting policy, we will also provide that any amount owed to the Federal Government by an issuer and its affiliates for unpaid administrative fees due to the Federal Government from these issuers and their affiliates for utilizing the Federal IDR process in accordance with § 149.510(d)(2), after HHS nets amounts owed by the Federal Government under these programs, would be the basis for calculating a debt owed to the Federal Government. Should the parallel related proposals related to the manner of the administrative fee collection and netting be finalized in the Federal Independent Dispute Resolution Operations proposed rules, we will work with issuers to prevent additional administrative burdens or unintended challenges for HHS and issuers in implementing this netting policy. Specifically, we intend to leverage our current integrated payment and collections process and reporting to simplify the implementation of this netting policy, to assist issuers in identifying debts owed through its current invoice process, and to keep issuers informed of updates to the integrated payment and collections processes.

Comment: One commenter recommended that if HHS finalizes the proposal to allow HHS to net unpaid IDR administrative fees with other HHS program funds owed to issuers, issuers should be allowed to file a request for reconsideration to contest errors, application of the relevant methodology, or mathematical errors with respect to the amount of an IDR administrative fee by HHS.

Response: We do not believe that additional dispute processes, such as the appeal process under § 156.1220, are needed. If HHS were to directly collect IDR administrative fees, issuers will be able to dispute charges or raise issues, such as mathematical errors, under existing processes as provided in § 30.12. Accordingly, all issuers' invoices for all programs identified under § 156.1215 provide instructions for how issuers can submit a written dispute of their invoices and request that HHS review the determination of the debt. Under this process, issuers have the right to inspect HHS records related to the invoice and present evidence that all or part of their debt is not past due or not legally enforceable. Once a written request presenting the evidence is submitted to HHS, we review the determination of the debt and work with issuers to resolve any issues or inconsistencies.

IV. Collection of Information Requirements

Under the Paperwork Reduction F of 1995, we are required to provide 60-day notice in the **Federal Register** and solicit public comment before a collection of information requirement is submitted to the Office of Management and Budget (OMB) for review and approval. To fairly evaluate whether an information collection should be approved by OMB, section 3506(c)(2)(A) of the Paperwork Reduction Act of 1995 requires that we solicit comment on the following issues:

- The need for the information collection and its usefulness in carrying out the proper functions of the agency.
- The accuracy of our estimate of the information collection burden.
- The quality, utility, and clarity of the information to be collected.
- Recommendations to minimize the information collection burden on the affected public, including automated collection techniques.

We solicited public comment on each of these issues for the following sections of this document that contain information collection requirements (ICRs). The public comments and our responses appear in this section, and in the applicable ICR sections that follow.

Comment: Regarding the Collection of Information requirements, one commenter stated that paperwork burden and information collection estimates concentrate on the design of products such as forms without also devoting attention to recordkeeping requirements, training, and legitimate private sector concerns over exposure to new enforcement actions. The commenter suggested that CMS can minimize these problems by ensuring adequate implementation periods, proposing major changes that start from a common and familiar knowledge base, soliciting feedback more often than annually, closely examining the ''regulatory sandbox'' concept, and designing and promulgating ''safe harbor'' guidance for entities.

Response: We appreciate the commenter's general feedback on ways that HHS can continually improve the accuracy of its cost estimates. We emphasize that HHS adheres to the Administrative Procedure Act [327] standards of notice and comment rulemaking and that HHS strives to estimate information collection burden as accurately as possible given the data available to inform its estimates, and incorporates feedback and input from interested parties, both through notice and comment rulemaking and informal feedback throughout the year.

A. Wage Estimates

To derive wage estimates, we generally use data from the Bureau of Labor Statistics to derive average labor costs (including a 100 percent increase for the cost of fringe benefits and overhead) for estimating the burden associated with the ICRs.[328] Table 14 presents the median hourly wage, the cost of fringe benefits and overhead, and the adjusted hourly wage.

As indicated, employee hourly wage estimates have been adjusted by a factor of 100 percent. This is necessarily a rough adjustment, both because fringe benefits and overhead costs vary significantly across employers, and because methods of estimating these costs vary widely across studies. Nonetheless, there is no practical alternative, and we believe that doubling the hourly wage to estimate total cost is a reasonably accurate estimation method.

[327] Public Law 79–404.

[328] See May 2022 Bureau of Labor Statistics, Occupational Employment Statistics, National Occupational Employment and Wage Estimates. *https://www.bls.gov/oes/current/oes_stru.htm.*

TABLE 14—ADJUSTED HOURLY WAGES USED IN BURDEN ESTIMATES

Occupation title	Occupational code	Median hourly wage ($/hr.)	Fringe benefits and overhead ($/hr.)	Adjusted hourly wage ($/hr.)
Business Operations Specialist	13–1000	$36.56	$36.56	$73.12
Web and Digital Interface Designer	15–1255	40.02	40.02	80.04
Web Developer	15–1254	37.78	37.78	75.56
Compliance Officer	13–1041	34.47	34.47	68.94
Accountant and Auditor	13–2011	37.50	37.50	75.00
Management Analyst	13–1111	45.81	45.81	91.62
Chief Executive	11–1011	91.12	91.12	182.24
Computer Systems Analyst	15–1211	49.15	49.15	98.30
Financial Examiners (State Government, excluding schools and hospitals)	13–2061	39.52	39.52	79.04
Actuary (Member of American Academy of Actuaries)	15–2011	54.80	54.80	109.60
General and Operations Manager	11–1021	47.16	47.16	94.32
General Internal Medicine Physician	29–1216	103.11	10.113	206.22
Computer Programmers	15–1251	47.02	47.02	94.04

B. ICRs Regarding Finalized Amendments to Normal Public Notice Requirements (31 CFR 33.112, 31 CFR 33.120 and 45 CFR Part 155.1312, and 45 CFR 155.1320)

We are finalizing amendments to the section 1332 waiver implementing regulations to set forth flexibilities related to State public notice requirements and post-award public participation requirements. Current regulations at 31 CFR 33.112 and 45 CFR 155.1312 specify State public notice and comment period and participation requirements for finalized section 1332 waiver requests, and 31 CFR 33.116(b) and 45 CFR 155.1316(b) specify the public notice and comment period and approval requirements under the accompanying Federal process.

However, this final rule does alter any of the requirements related to section 1332 waiver applications, compliance and monitoring, or evaluation in a way that would impose any additional costs or burdens for States seeking waiver approval or those States with approved waiver plans that have not already been captured in prior burden estimates. The Departments anticipate that implementing these provisions will not significantly change or decrease the associated burden currently approved under OMB control number: 0938–1389, expiration date: February 29, 2024.

We did not receive any comments on ICRs regarding the amendments to normal public notice requirements for section 1332 waivers.

C. ICRs Regarding Basic Health Program Regulations (42 CFR 600.320)

We are finalizing requirements at 42 CFR 600.320(c)(1) through (3) that a State operating a BHP must establish a uniform method of determining the effective date of eligibility for enrollment in a standard health plan which follows: (1) the Exchange coverage effective date standards at 45 CFR 155.420(b)(1); (2) the Medicaid effective date standards at 42 CFR 435.915 exclusive of § 435.915(a); or (3) an effective date of eligibility of the first day of the month following the month in which BHP eligibility is determined. We are also adding 42 CFR 600.320(c)(4) which allows for a State to establish its own effective date of eligibility for enrollment policy subject to HHS approval. We note that only 42 CFR 600.320(c)(3) and (4) are newly finalized. The options under 42 CFR 600.320(c)(1) and (2) currently exist.

We estimate that the policies under 42 CFR 600.320(c)(3) and (4) will have no impact on the information collection burden. We note that any cost would be incurred 100 percent by the State, as Federal BHP funds cannot be used for program administration.

We sought comment on these assumptions.

We did not receive any comments in response to the burden estimates for this policy change. We are finalizing these estimates as proposed.

D. ICRs Regarding Election To Operate an Exchange After 2014 (45 CFR 155.106)

We are finalizing amendments to § 155.106(a)(2) to add new paragraphs (a)(2)(i) and (ii). Specifically, we are finalizing that as part of a State's activities for its establishment of a State Exchange, the State provide upon request, supplemental documentation to HHS detailing the State's implementation of its State Exchange functionality, including information regarding the State's ability to implement and comply with Federal requirements for operating an Exchange. Such supporting documentation would inform HHS's decision to approve or conditionally approve a State Exchange and could include, for example, materials demonstrating progress toward meeting State Exchange Blueprint application requirements, documentation that details a State's plans to implement and meet the Exchange functional requirements as laid out in the State Exchange Blueprint application, or plans to engage in consumer assistance programs and activities. Additionally, we are finalizing the requirement that when a State submits its State Exchange Blueprint application to HHS for approval, the State must provide the public with notice and a copy of its State Exchange Blueprint application. Further, at some point following a State's submission of its State Exchange Blueprint application to HHS, a State must conduct at least one public engagement (such as a townhall meeting or public hearing), in a timeline and manner considered effective by the State, with concurrence from HHS, at which interested parties can learn about the State's intent to establish a State Exchange and the State's progress toward executing that transition. We are also finalizing the requirement that while a State is in the process of establishing a State Exchange and until HHS has approved or conditionally approved the State Exchange Blueprint application, the State conduct periodic public engagements at which interested parties can continue to learn about the State's progress towards establishing a State Exchange, in a timeline and manner considered effective by the State, with concurrence from HHS. These finalized requirements will impact States that are considering, or are in the process of, establishing a State Exchange for PY 2025 and subsequent years. We anticipate minimal burden on these States, as we believe they will have sufficient time to plan for such public-facing State Exchange

engagements and activities if not already in their plans.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

E. ICRs Regarding Adding and Amending Language To Ensure Web-Brokers Operating in State Exchanges Meet Certain HHS Standards Applicable in the FFEs and SBE–FPs (45 CFR 155.220)

We are finalizing amendments to § 155.220 to apply to web-brokers operating in State Exchanges, and consequently in State Exchanges, in both the Individual Market Exchanges and SHOPs, certain existing HHS standards governing web-brokers' use of non-Exchange websites to assist consumers with enrolling in QHPs and applying for APTC/CSRs in a manner that constitutes enrollment through the Exchange. The burden associated with these amendments includes costs for web-brokers assisting consumers in State Exchanges to meet the requirements in finalized § 155.220(n) and for State Exchanges related to the development and oversight of web-broker programs within their State. We anticipate that the same number of web-brokers operating in the Exchanges on the Federal platform (20) will also operate in the 5 State Exchanges and will be required to incur this burden for each of the 5 State Exchanges they may operate in. We estimate the relevant costs based on current Federal costs. These estimates are described below.

These amendments will impose burdens on web-brokers assisting consumers in State Exchanges for costs related to web-development to meet the finalized website display requirements to be extended to web-brokers operating in these State Exchanges and costs associated with creating and submitting audit documentation for the applicable Exchange's review. We solicited feedback from State Exchanges regarding these burden estimates and the number of web-brokers expected to participate in State Exchanges pursuant to this proposal. Although we have allowed certain flexibility for State Exchanges to tailor their web-broker program and establish their own standards with respect to operational readiness demonstrations by their web-brokers, we expect the costs can be reasonably estimated based on the Federal costs as follows.

We estimate it will take 5 hours for a Business Operations Specialist at an hourly rate of $73.12 to implement the standardized disclaimers required under § 155.220(c)(3)(i)(A) and (G), along with 30 hours at an hourly rate of $80.04 for a Web and Digital Interface Designer to modify the website to implement the standardized disclaimers across 5 State Exchanges. Therefore, for the standardized disclaimers under § 155.220(c)(3)(i)(A) and (G), we estimate each web-broker assisting consumers in State Exchanges will incur a cost of $2,766.80 (5 hours × $73.12 per hour + 30 hours × $80.04 per hour). We estimate a cumulative burden of $55,336 for the anticipated 20 web-brokers operating across the State Exchanges ($2,766.80 × 20 web-brokers). Additionally, finalized new paragraph § 155.220(n)(1) allows State Exchanges the flexibility to add State-specific language to the standardized disclaimers, provided the additional language does not conflict with the HHS-provided standardized disclaimers. We solicited feedback from State Exchanges regarding how these flexibilities would impact these burden estimates.

Additionally, we anticipate it will take up to 100 hours at an hourly rate of $80.04 for a Web and Digital Interface Designer to modify the website to implement and display the standardized QHP comparative information required under § 155.220(c)(3)(i)(A) (including the quality ratings assigned by HHS and enrollee satisfaction survey) across 5 State Exchanges. Therefore, for the display of the QHP comparative information on web-broker non-Exchange websites, we estimate each web-broker operating in State Exchanges will incur a cost of $8,004 (100 hours × $80.04 per hour). We estimate a cumulative burden of $160,080 for the anticipated 20 web-brokers operating across the State Exchanges ($8,400 × 20 web-brokers).

We anticipate it will take 25 hours for a Web and Digital Interface Designer at an hourly rate of $80.04 to modify the website to display the APTC and CSR eligibility information required under § 155.220(c)(3)(i)(I) across 5 State Exchanges. Therefore, for changes related to implementation of the HHS minimum web-broker standards related to display of consumer APTC and CSR eligibility information, we estimate each web-broker operating in States with State Exchanges will incur a cost of $2,001 (25 hours × $80.04). We therefore estimate a cumulative burden of $40,020 for the anticipated 20 web-brokers operating across the 5 State Exchanges ($2,001 × 20 web-brokers). Additionally, as discussed in the proposed rule (88 FR 82560), we allow State Exchanges flexibility in how consumer eligibility information for APTC or CSRs is displayed on websites by web-brokers in State Exchanges, at the discretion of the State Exchange on the display of that information. We solicited feedback from State Exchanges regarding how these flexibilities would impact these burden estimates.

Finalized paragraph § 155.220(c)(4)(iii) will extend certain downstream agent and broker requirements at § 155.220(c)(4)(i) that currently apply to web-brokers in FFE and SBE–FP States and govern the use of the web-broker's non-Exchange website by other agents or brokers assisting Exchange consumers to also apply to web-brokers, and their downstream agents and brokers in State Exchanges, and consequently to these State Exchanges. Under the finalized provision, web-brokers that permit other agents or brokers, through a contract or other arrangement, to use the web-broker's non-Exchange website to help an applicant or enrollee complete a QHP selection or complete the Exchange eligibility application will be required to meet the standards at § 155.220(c)(4)(i)(A), (B), (D), and (F) when assisting consumers in States with State Exchanges. This includes extension of requirements for web-brokers to verify that any agent or broker accessing or using the website is licensed in the State in which the consumer is selecting the QHP and has completed training and registration and has signed all required agreements with the applicable State Exchange. It will also require web-brokers to terminate the agent or broker's access to its website if the applicable State Exchange determines the agent or broker is in violation of the provisions described in this section and/or if the applicable State Exchange terminates any required agreement with the agent or broker. In addition, it will also extend a requirement for web-brokers to provide State Exchanges with a list of agents and brokers who enter into such a contract or other arrangement to use the web-broker's non-Exchange website, in a form and manner to be specified by the State Exchanges similar to the requirement in § 155.220(c)(4)(i)(A) for web-brokers in FFE and SBE–FP States to report the same information to HHS. We understand that web-brokers who work with and allow other agents and brokers to use the web-brokers' non-Exchange websites to assist Exchange consumers typically obtain and manage information on each of their downstream agents or brokers as part of an onboarding process. As a result, we expect web-brokers will already have the necessary data to provide a list to the applicable State Exchange of each of

the other agents or brokers that are allowed to use the web-brokers' non-Exchange websites to assist Exchange consumers. We estimate that it will take up to 240 hours at an hourly cost of $94.04 for a computer programmer to perform the necessary programming to comply with these requirements in § 155.220(c)(4)(i)(A), (B), and (D), and 10 hours at an hourly cost of $73.12 for a Business Operations Specialist to develop a listing of affiliated third-party agents and brokers across all 5 State Exchanges. Therefore, for changes related to implementation of these HHS minimum web-broker standards related to downstream agents or brokers, we estimate each web-broker operating in State Exchanges will incur a cost of $23,300.80 per web-broker (($94.04 × 240 hours) + ($73.12 × 10 hours)). We estimate a cumulative burden of $466,016 for an anticipated 20 web-brokers operating across the State Exchanges ($23,300.80 × 20 web-brokers).

We estimate it will take 95 hours for a Business Operations Specialist at an hourly rate of $73.12 to oversee and monitor compliance with the operational readiness requirements established by State Exchanges, as required by new § 155.220(n)(2) across 5 State Exchanges. Therefore, for compliance requirements, we estimate each web-broker operating in States with State Exchanges will incur a cost of $6,946.40 (95 hours × $73.12) for the finalized operational readiness requirements. We estimate a cumulative burden of $138,928 for the anticipated 20 web-brokers operating across the 5 State Exchanges ($6,946.40 × 20 web-brokers). These burden estimates are provided based on the estimates of the cost for DE entities to comply with the operational readiness requirements established by HHS. Finalized paragraph § 155.220(n)(2) will allow State Exchanges to define and establish the form and manner for their web-brokers to establish operational readiness. Although we anticipate State Exchanges would establish requirements similar to the requirements for demonstrating operational readiness to operate in the FFE or SBE–FPs, we solicited feedback from State Exchanges regarding how well these burden estimates reflect their anticipated requirements.

Therefore, we estimate each web-broker operating in all 5 State Exchanges will incur a one-time burden in PY 2025 of 505 hours at a cost of $43,019. We estimate a cumulative burden of 10,100 hours at an estimated cost of $860,380 for all 20 web-brokers operating across the 5 State Exchanges. We sought comment on the number of State Exchanges that would be interested in establishing a web-broker program to allow web-brokers to host non-Exchange websites to assist Exchange consumers in their State and on the number of web-brokers interested in operating in those State Exchanges.

Finalized paragraph 155.220(n) will require State Exchanges to comply with the HHS standards described above and in the preamble. Finalized paragraph 155.220(n)(1) will allow State Exchanges the flexibility to add State-specific language to the standardized disclaimers provided the additional language does not conflict with the HHS-provided standardized disclaimers and provides flexibility in how consumer eligibility information for APTC or CSRs is displayed on websites by web-brokers in State Exchanges, at the discretion of the State Exchange on the display of that information. Finalized paragraph (2) under this new section will also require State Exchanges to establish the form and manner for their web-brokers to demonstrate operational readiness, which may include submission or completion of the same items addressed in § 155.220(c)(6)(i)–(v) to the State Exchanges, in the form and manner specified by the Exchange. The burden associated with these finalized changes includes costs for existing and future State Exchanges related to drafting new policy, updating standards, and potentially hiring additional staff to perform functions not currently being performed by the State Exchange, such as for drafting web-broker disclaimer language, drafting consumer-facing educational content, and engaging web-brokers in operational readiness, that will now incur new costs related to establishment of a web-broker program and ongoing monitoring of web-brokers to enforce the minimum HHS standards and any additional State-specific requirements.

We estimate the relevant costs based on current Federal costs as follows. We estimate that 5 States will opt to host a web-broker program for their State Exchanges. We anticipate the total burden associated with the State Exchanges developing the associated policies and procedures, including providing web-brokers with examples and technical assistance (including technical implementation guidance such as providing the quality ratings assigned and enrollee satisfaction survey data) to be up to 528 hours per State. This assumes 480 hours for a GS–13, Step 5 employee at an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[329] doubled to account for fringe benefits and overhead) and 48 hours for a GS–15, Step 5 employee at an hourly rate of $169.10 (the hourly wage rate for a GS–15, Step 5 employee in the Washington, DC area,[330] doubled to account for fringe benefits and overhead). In total, for the 5 State Exchanges anticipated to participate, we estimate a burden of 2,640 hours (5 State Exchanges × 528 hours per State Exchange) at a cost of $332,568 (2,400 hours × $121.66 + 240 × $169.10).

We estimate it will take 40 hours each for the State Exchange equivalent of 2 GS–13, Step 5 employees at an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[331] doubled to account for fringe benefits and overhead) to complete initial documentation review related to all web-broker requirements pursuant to this finalized policy, for a total cost to State governments of $9,732.80 (2 × 40 hours × $121.66) per State Exchange. We estimate it will take 8 hours for the equivalent of 1 GS–15, Step 5 employee at an hourly rate of $169.10 (the hourly wage rate for a GS–15, Step 5 employee in the Washington, DC area,[332] doubled to account for fringe benefits and overhead) to provide managerial review and oversight, for a total cost to State governments of $1,352.80 (1 × 8 hours × $169.10) per State Exchange. Additionally, we estimate the total burden for each State government for State contract and contractors ongoing reviews for oversight will include 1,087 hours at GS–12, Step 5 with an hourly rate of $102.30 (the hourly wage rate for a GS–12, Step 5 employee in the Washington, DC area,[333] doubled to account for fringe benefits and overhead) and 2,305 hours at GS–13, Step 5 with an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[334] doubled to account for fringe benefits and overhead), and the total burden across all 5 States to be 16,960 hours. Therefore, we estimate a cost to each State governments of $469,225.60, with a total estimated cost to State governments of $2,346,128 (5 States × $469,225.60). We sought comment from

[329] OPM. (2023, January). *Salary Table 2023–DCB Incorporating the 4.1% General Schedule Increase and a Locality Payment of 32.49% For the Locality Pay Area of Washington-Baltimore-Arlington, DC-MD-VA-WV-PA Total Increase: 4.86%. https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2023/DCB_h.pdf.*

[330] *Id.*

[331] *Id.*

[332] *Id.*

[333] *Id.*

[334] *Id.*

State Exchanges on these burden estimates.

We recognize that some State Exchanges may utilize web-brokers already assisting consumers in the FFEs and SBE–FPs, and encourage State Exchanges to leverage web-broker operational readiness demonstrated to participate in the FFEs or SBE–FPs when possible, as to minimize the burdens on the State Exchanges and their web-brokers.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates with modifications to the estimated burden hours for web-brokers to implement the requirements associated with this policy. We summarize and respond to public comments received regarding this provision below.

Comment: One commenter suggested that the burden estimates could be substantially reduced if the State Exchanges leverage or choose to mirror the HHS requirements. This commenter noted concern that it is misleading to present a separate burden analysis for web-brokers and DE entities, as the majority of web-brokers are DE entities and the burden for complying with web-broker standards on top of EDE standards is minimal.

Response: We appreciate the comment that the burden estimates could be substantially reduced if the State Exchanges leverage the HHS requirements. Although we agree with this comment, the flexibilities afforded to State Exchanges as part of this finalized policy, particularly with regards to implementation of web-broker programs and requirements, present the possibility of significant differences between web-broker programs in different States while also establishing baseline consumer protections across the State Exchanges. We formulated these burden estimates to account for a possible scenario of varied web-broker program requirements across State Exchanges. However, we encourage State Exchanges to leverage the HHS requirements and believe the implementation costs for both State Exchanges and web-brokers may be substantially reduced if the State Exchanges leverage the HHS requirements. However, the assumption that States can save money by mirroring HHS standards assumes that all entities participating have complied and met the HHS standards, as verified by HHS, and ignores the possibility that entities may participate in a given State's web-broker or DE entity program as a net new entity, with no experience or documented compliance at the Federal level. We carefully considered this commenter's feedback and reduced relevant burden estimates for requirements where we believe there is a high likelihood that State Exchanges will adopt the same requirements as the FFE. We disagree where the commenter suggested it is misleading to present a separate burden analysis for web-brokers and DE entities. Although the majority of DE entities are web-brokers, there exist some DE entities that are not web-brokers (for example, Issuer DE Technology Providers). For that reason, we believed it was important to provide a comprehensive burden estimate for participating in web-broker programs and DE entity programs. However, we acknowledge there is significant overlap between the requirements for web-brokers and DE entities, and, accordingly, have reduced the entity burden estimates for DE entities distinct from web-brokers. We note, however, given the State's requirements for a DE entity under § 155.221 may require a different burden for an entity to implement and comply with compared to the State's requirements for a web-broker under § 155.220.

Comment: One supporting commenter provided comments related specifically to the portion of the burden estimate regarding costs for State Exchanges to implement web-broker programs. This commenter noted that the cost estimates for States to implement this finalized proposal are overstated and fail to incorporate the potential cost savings and additional user fee revenues that States could realize through utilization of web-brokers, including reduced burdens on State call centers and State Exchanges. The commenter expressed concern that the burden estimates were based on salary information for Washington, DC, citing higher salaries for that locality as compared to employees in the majority of State Exchanges. This commenter requested clarification for how the estimated hours for contractor oversight of State Exchanges were determined.

Response: We acknowledge the concern that the burden estimates for State Exchanges to implement web-broker programs are overstated. As acknowledged above, this finalized policy provides flexibility to State Exchanges in their implementation of web-broker programs. These burden estimates account for the possibility that State Exchanges may implement web-broker programs differing from the FFE program. We encourage State Exchanges to leverage the HHS requirements when developing their web-broker programs and we anticipate that doing so would substantially reduce the burden for State Exchanges to develop and implement these programs. In addition, we acknowledge the comment that web-broker programs may provide additional user fee revenues and cost savings to State Exchanges associated with reduced burdens on State call centers and State Exchanges. Although we acknowledge that there could be cost savings associated with implementing web-broker programs in State Exchanges, we have not conducted a detailed analysis on the cost savings associated with the implementation of web-broker programs in the FFE and, therefore, cannot quantify the extent of any such savings. Furthermore, these estimates are specific to defining the oversight policies and procedures, and the implementation of such oversight for web-brokers and DE entities under §§ 155.220 and 155.221; these estimates are not intended to calculate the total cost—or savings—for any given State to implement a web-broker or DE program, including the costs of developing and maintaining the technical infrastructure to maintain a web-broker and DE entity program. However, we do recognize the potential for savings and are open to feedback as we continue to work with our State partners on implementation of these programs. We acknowledge the concern regarding the use of Washington, DC, labor rates in calculating these burden estimates. In the absence of a national average pay scale, we acknowledge there will be variations in regional pay scales among State Exchanges, including some which may be higher or lower than the rates used to calculate these estimates. With regards to the estimates for contractor oversight of State Exchanges, we are clarifying that these estimates were calculated by mapping labor for the relevant requirements to GS categories based on the applicable FFE contractor support labor costs and hours for the applicable requirements and estimated number of entities. We acknowledge that any given State may experience a higher or lower cost for implementing these programs depending on the extent (that is, scope and frequency) of the State's oversight mechanisms, the scope of the State's specific requirements for these programs, and the general quality and compliance posture of web-brokers or DE entities intending to participate in the State.

Comment: One supporting commenter provided comments related to the portion of the burden estimate regarding costs for web-brokers to operate in State Exchanges. Specifically, this commenter provided detailed feedback on the estimated burden hours based on their

experience as a web-broker operating in the FFEs. This included feedback on the burden associated with implementing §§ 155.220(c)(3)(i)(A), 155.220(c)(3)(i)(G), 155.220(c)(3)(i)(I), 155.220(c)(4)(i)(A), 155.220(c)(4)(i)(B), 155.220(c)(4)(i)(D), and 155.220(n)(2).

Response: We appreciate the feedback on these burden estimates from a web-broker currently operating in the FFEs. We recognize the value of feedback from an entity with experience implementing the FFE program requirements and we carefully considered this feedback and have adjusted the burden estimates where applicable. In making these adjustments, we considered that the commenter has considerable experience operating in the FFE. As the commenter acknowledged, other web-brokers may have differing levels of technical expertise and capacity. We have accounted for the costs associated with implementing these requirements from the perspective of web-brokers with limited experience. However, we agree that the burden may be substantially lower for web-brokers with increased technical experience and capacity. In considering the feedback on these burden estimates, we note there were several assumptions made regarding the State Exchanges' provision of data to web-brokers (for example, the provision of QHP data and agent or broker registration data). These burden estimates account for a scenario where there may be variability between the format of data provided across State Exchanges. We encourage State Exchanges to leverage the data formats used in the FFEs and are committed to providing technical assistance to State Exchanges to facilitate such standardization.

F. ICRs Regarding Establishing Requirements for DE Entities Mandating HealthCare.gov Changes To Be Reflected on DE Entity Non-Exchange Websites Within a Notice Period Set by HHS (45 CFR 155.221(b))

As discussed in the preamble of this finalized rule, we are finalizing without modification but with technical changes additional language to § 155.221 requiring that, in FFE and SBE–FP States, would require DE entities to implement and prominently display website display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. within a time period specified by HHS, unless HHS approves a deviation.

Based on our experience with operating the DE program on the FFEs and SBE–FPs over the past several years, we estimate that approximately three or fewer display changes will be required annually. We estimate that a total of 100 web-brokers and QHP issuers participating in DE in FFE and SBE–FP States will be required to comply with these requirements. These display changes may range from changes such as, but not limited to, relatively simple text-based updates to more complex display changes involving the website's backend display methodology or algorithms. We estimate approximately two simpler and one more complex display change annually. We estimate that it will take a Web and Digital Interface Designer 30 hours annually, at a cost of $80.04 per hour, to implement these changes, at a total annual cost of approximately $2,401.20 ($80.04 × 30 hours) per web-broker or QHP issuer. We therefore estimate a total annual burden of 3,000 hours (30 × 100) at a cost of $240,120 (3,000 hours × $80.04 per hour) for all applicable web-brokers and QHP issuers.

We recognize that system constraints may prevent DE entity non-Exchange websites from precisely mirroring the *HealthCare.gov* display approach, and that DE entities may have an idea for implementation that does not meet the standards defined by HHS but would effectively communicate the same information to consumers. We are finalizing that DE entities assisting consumers in FFE and SBE–FPs that intend to deviate from the standards defined by HHS will be required to submit a deviation request. Those requests will be subject to review by HHS in advance of implementation of any alternative display approaches.

Based on internal data, we estimate that 25 web-brokers and QHP issuers assisting consumers in FFE or SBE–FP States will submit a request to deviate from the standards defined by HHS annually. We estimate it will take a compliance officer approximately 3 hours annually, at a rate of $68.94 per hour, to prepare and submit the request to deviate from the communicated standards, including preparing the rationale explaining the request. We therefore estimate the total annual burden for all web-brokers and issuers in completing and submitting a request to deviate to be approximately $5,170.50 annually.

We do not expect this finalized policy to impose a new burden on EDE entities, as EDE entities are already following the process outlined in this finalized policy through the change request processes described in the Third-Party Auditor Guidelines.

Because the proposal to ensure DE entities assisting consumers in State Exchanges meet certain standards applicable in the FFEs and SBE–FPs at new § 155.221(j) was finalized, we estimate that DE entities may incur burden related to the website development needed to implement and prominently display changes made to State Exchange websites per the standards defined by the State Exchange. We anticipate that the web-development costs cited above will apply for each DE entity assisting consumers in State Exchanges. As described in the preamble, there may be burden associated with maintaining DE environments tailored to each States Exchanges' display requirements. However, based on our experience conducting oversight of DE entity non-Exchange websites assisting consumers in FFEs and SBE–FPs, it is our understanding that DE entities are familiar with and capable of tailoring website displays based on specific criteria and, as such, we anticipate entities are capable of tailoring website displays to the requirements of the State the consumer is seeking assistance in. We anticipate a total annual burden of $247,358.70 for DE entities assisting consumers in States with State Exchanges associated with implementing display changes and submitting requests to deviate from the standards defined by the State Exchange across 5 State Exchanges, should the State Exchange elect to permit deviation requests. The total burden was calculated by multiplying the costs associated with implementing display changes among 20 DE entities expected to operate across 5 State Exchanges ($2,401.20 × 5 State Exchanges × 20 DE entities) and adding this to the expected costs for 7 DE entities operating across 5 State Exchanges to submit requests to deviate from the standards defined by the State Exchanges ($206.82 × 5 State Exchanges × 7 DE entities). If the State Exchange permits deviation requests, those requests will be subject to review by the State Exchange in advance of implementation of any alternative website displays. We sought comment on the burden of this proposal on DE entities planning to operate in State Exchanges.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comment received regarding the requirements that *HealthCare.gov* or State Exchange website changes be implemented and prominently

displayed on DE entity non-Exchange websites within a time notice period set by HHS below.

Comment: One commenter noted they believe this proposal will propose little to no additional burden on most DE entities because it is believed that many of the applicable entities may already be complying with the proposed standards.

Response: We appreciate this comment and agree, as described above and in the proposed rule, that the majority of DE entities are already complying with the requirements associated with this policy because they are subject to the existing HHS-initiated change request practices outlined in the Third-Party Auditor Guidelines. However, we believe the provided burden estimates appropriately characterize the burden for the existing HHS-initiated change request process and for the expansion of this process to Classic DE entities and to DE entities operating in State Exchanges.

G. ICRs Regarding Ensuring DE Entities Operating in State Exchanges Meet Certain Standards Applicable in the FFEs and SBE–FPs (45 CFR 155.221)

We are finalizing amendments to § 155.221 to apply to DE entities operating in State Exchanges, and consequently State Exchanges that choose to implement a DE program, certain existing HHS standards applicable to DE entities assisting consumers with enrolling in QHPs and applying for APTC/CSRs in FFEs and SBE–FPs, in both the Individual Market Exchanges and SHOPs. We anticipate approximately 20 DE entities will operate in the 5 State Exchanges and will be required to incur this burden for each of the 5 State Exchanges they may operate in. The burden associated with these changes includes costs for DE entities assisting consumers in State Exchanges to meet the requirements described in finalized § 155.221(j) and for State Exchanges related to the development and oversight of DE programs within their State. We estimate relevant costs based on current Federal costs. These estimates are described below.

The burden associated with operating a DE program includes costs for DE entities related to web-development to meet the website display requirements being applied to DE entities operating in States with State Exchanges and costs for creating, storing, and submitting operational readiness documentation for Exchange review. Although these policies allow States certain flexibility for State Exchanges to tailor their DE program and establish their own standards with respect to operational readiness demonstrations by their DE entities, including whether to require third-party audits of DE entities and to impose additional requirements beyond the proposed HHS minimum standards as they determine may be appropriate based on their operational or business needs, we expect the costs to reasonably be estimated based on the Federal costs as follows.

We estimate it will take 5 hours for a DE entity's Business Operations Specialist at an hourly rate of $73.12 to implement the standardized disclaimer required under § 155.221(b)(2), along with 15 hours at an hourly rate of $80.04 for a Web and Digital Interface Designer to modify the DE entity non-Exchange website to implement the standardized disclaimer across 5 State Exchanges. Therefore, for the standardized disclaimer under § 155.221(b)(2), we estimate each DE entity operating in State Exchanges that operate their own eligibility and enrollment platform will incur a burden of 20 hours at an estimated cost of $1,566.20 (5 hours × $73.12 per hour + 15 hours × $80.04 per hour). We estimate the anticipated 20 DE entities will incur a cumulative burden of 400 hours at an estimated cost of $31,324 ($1,566.20 × 20 DE entities).

Costs related to demonstrating operational readiness at finalized § 155.221(j) will depend on the DE entity's desired enrollment pathway and the options made available by the State Exchange. Although we are allowing States the flexibility to establish operational readiness requirements, including the form and manner for their DE entities to demonstrate operational readiness, we encourage State Exchanges to leverage the existing items in § 155.220(b)(4)(i) and (ii) as the starting point for their operational readiness reviews. If State Exchanges leverage these items, we anticipate the burden associated with DE entity demonstration of operational readiness can be estimated based on the Federal costs as follows. We estimate it will take up to 360 hours for an Auditor at an hourly rate of $75.00 to submit business audit documentation across 5 State Exchanges, and we estimate 1 DE entities will participate in a manner that would trigger this information collection, resulting in an estimated cost of $27,000 per DE entity (360 hours × $75.00). We estimate it will take up to 122 hours for an Auditor at an hourly rate of $75.00 to submit security and privacy audit documentation across 5 State Exchanges, and we estimate 3 DE entities will participate in a manner that would trigger this information collection, resulting in an estimated cost of $9,150 per DE entity (122 hours × $75.00). We estimate it will take 45 hours for a Business Operations Specialist to complete and submit a typical Enhanced Direct Enrollment (EDE) documentation package and related information across 5 State Exchanges at an hourly rate of $73.12, and 15 DE entities will participate in a manner that will trigger this information collection, resulting in an estimated cost of $3,290.40 per DE entity (45 hours × $73.12). Therefore, for a DE entity to demonstrate operational readiness and compliance with applicable requirements to State Exchanges, we estimate each DE entity will incur a burden of up to 527 hours at an estimated cost of up to $39,440.40 (360 hours × $75.00 per hour + 122 hours × $75.00 per hour + 45 hours × $73.12), but many DE entities will incur a lower burden and cost due to not participating in a manner that would trigger some of these information collection costs. We estimate a cumulative burden of 1,401 hours at an estimated cost of $103,806 for all applicable DE entities operating across the 5 State Exchanges ($27,000 × 1 DE entities + $9,150 × 3 DE entities + $3,290.40 × 15 entities). We solicited feedback from State Exchanges with regards to the form and manner of documentation they would require DE entities to submit to demonstrate operational readiness, along with the estimated burden associated with those submissions.

We estimate it will take 100 hours for a Web and Digital Interface Designer at a rate of $80.04 per hour to modify the DE entity's non-Exchange website to comply with the requirements to display and market QHPs offered through the Exchange, individual health insurance coverage, and any other products on at least three separate websites pages in accordance with §§ 155.221(b)(1) and (3) and (c) across 5 State Exchanges. Therefore, for these website display requirements, we estimate each DE entity operating in State Exchanges will incur an estimated cost of $8,004 (100 hours × $80.04 per hour). We estimate 8 DE entities will trigger this information collection with a cumulative burden of 800 hours at an estimated cost of $64,032 across the State Exchanges ($8,004 × 8 DE entities).

The burden associated with this change also includes costs for DE entities operating in State Exchanges with oversight of direct enrollment entity application assisters, as described in § 155.221(d) (citing § 155.415(b)), for those DE entities that opt to use these application assisters, when permitted by the applicable State Exchange and only to the extent permitted by applicable

State law. As described in the preamble, the requirements at §§ 155.415(b)(2) and (b)(3) are already applicable to DE entities operating in all Exchanges and therefore do not represent a new burden for DE entities. The extension of § 155.221(d) to DE entities operating in State Exchanges will require DE entities' application assisters to complete appropriate State-required training and registration in a manner specified by the State Exchange consistent with § 155.415(b)(1). We estimate that up to 1,000 application assisters will operate in each State Exchange that opts to implement a DE program and allows DE entity application assisters to assist Exchange consumers. Accordingly, we anticipate that 5,000 application assisters across an estimated 5 States will participate. We estimate the burden for 20 DE entities to comply with this requirement at 3 hours per assister for a total annual burden of 750 hours for a Compliance Officer at an hourly wage of $68.94 for a total cost of $51,705 per entity. We estimate a cumulative burden of 15,000 hours at an estimated cost of $1,034,100 for 20 DE entities operating across the 5 State Exchanges ($51,705 × 20 entities).

Finalized paragraph § 155.221(j)(3) will extend requirements for DE entities assisting consumers in State Exchanges to implement and prominently display changes in a manner that is consistent with the display changes made by the State Exchange to the State Exchanges' website by meeting standards communicated and defined by the State Exchange within a time period set by the State Exchange, unless the State Exchange approves a deviation from those standards under the deviation request process it would be required to establish should the State Exchange elect to permit deviations. The costs associated with DE entities implementing this finalized policy in State Exchanges is discussed in the ICR section related to finalized paragraph § 155.221(b)(6).

Regarding finalized paragraph § 155.221(a) extending requirements under § 156.1230(a) to DE QHP issuers operating in State Exchanges, we do not anticipate any additional burdens for QHP issuers, beyond the estimated burdens for the website display requirements described above, to provide consumers with correct information, without omission of material fact, regarding the Exchanges, QHPs offered through the Exchanges, and insurance affordability programs, or to refrain from marketing or conduct that is misleading, coercive, or discrimination based on race, color, national origin, disability, age, or sex.

Therefore, we estimate each DE entity operating in State Exchanges will incur a one-time burden in PY 2025 of up to 1,397 hours at a cost of up to $100,715.60 for an overall total for all DE entities operating across the State Exchanges of up to 17,601 hours at an estimated cost of $1,233,262 to comply with these finalized requirements. We sought comment on the burden of these requirements on DE entities planning to participate in State Exchanges. For the purposes of better determining burden estimates, we also sought comment on the number of State Exchanges that operate their own eligibility and enrollment platforms and would be interested in implementing a DE program in their State and on the number of DE entities interested in operating in those State Exchanges.

Finalized paragraph § 155.221(j) will require State Exchanges to comply with the FFE standards described above and in the preamble. § 155.221(j)(1) allows State Exchanges the flexibility to add State-specific information to the standardized disclaimer that does not conflict with the HHS-provided language. Finalized paragraph (2) under this new section also requires State Exchanges to establish the form and manner for their DE entities to demonstrate operational readiness and compliance with applicable requirements, in the form and manner specified by the Exchange. Finalized paragraph (3) will require State Exchanges establish requirements for their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made by the State Exchange to State Exchanges' websites by meeting standards communicated and defined by the State Exchange within a time period set by the State Exchange. The burden associated with these finalized changes includes costs for State Exchanges related to drafting new policy, updating standards, and potentially hiring additional staff to perform functions not currently being performed by the State Exchange, such as for drafting DE entity program requirements and guidelines, including establishment of DE entity operational readiness programs, establishment of procedures related to defining and communicating standards for required display changes, establishment of any State-specific disclaimer text, and ongoing monitoring of DE entity compliance with applicable HHS standards and any additional State-specific requirements. DE entities operating in States transitioning off of the Federal Platform to a State Exchange will likely have fewer costs as they should already be meeting the HHS minimum requirements. No State Exchange has implemented DE to date, so we are not able to provide precise costs estimates of the burden associated with these finalized changes for State Exchanges. However, we anticipate that operational costs related to establishing polices and adding staff in order to operate a compliant DE program under § 155.221 may be estimated based on Federal platform costs and will be added to the costs and burdens of transitioning to State Exchange.

We estimate that 5 States will opt to host a DE program for their State Exchanges. We anticipate the total burden associated with the State Exchanges developing the associated policies and procedures to be up to 528 hours per State. This assumes 480 hours for a GS–13, Step 5 employee at an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[335] doubled to account for fringe benefits and overhead) and 48 hours for a GS–15, Step 5 employee at an hourly rate of $169.10 (the hourly wage rate for a GS–15, Step 5 employee in the Washington, DC area,[336] doubled to account for fringe benefits and overhead). In total, for the 5 State Exchanges anticipated to participate, we estimate a burden of 2,640 hours (5 State Exchanges × 528 hours per State Exchange) at a cost of $332,568 (2,400 hours × $121.66 per hour + 240 hours × $169.10 per hour).

Based on the Federal platform costs, we estimate it will take 60 hours each for the State Exchange equivalent of 2 GS–13, Step 5 employees at an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[337] doubled to account for fringe benefits and overhead) to complete initial documentation review related to all DE entity requirements pursuant to this finalized policy, for a total cost to State governments of $14,599.20 (2 employees × 60 hours per employee × $121.66 per hour) per State Exchange. We estimate it will take 12 hours for the equivalent of 1 GS–15, Step 5 employee at an hourly rate of $169.10 (the hourly wage rate for a GS–15, Step 5 employee in the

[335] Office of Personnel Management. (2023, January). *Salary Table 2023–DCB Incorporating the 4.1% General Schedule Increase and a Locality Payment of 32.49% For the Locality Pay Area of Washington-Baltimore-Arlington, DC-MD-VA-WV-PA Total Increase: 4.86%. https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2023/DCB_h.pdf.*

[336] *Id.*

[337] *Id.*

Washington, DC area,[338] doubled to account for fringe benefits and overhead) to provide managerial review and oversight, for a total cost to State governments of $2,029.20 (12 hours × $169.10 per hour) per State Exchange. Additionally, we estimate the total burden for each State government for State contract and contractors ongoing reviews for oversight will include 1,631 hours for a GS–12, Step 5 employee with an hourly rate of $102.30 (the hourly wage rate for a GS–12, Step 5 employee in the Washington, DC area,[339] doubled to account for fringe benefits and overhead) and 3,458 hours for a GS–13, Step 5 employee with an hourly rate of $121.66 (the hourly wage rate for a GS–13, Step 5 employee in the Washington, DC area,[340] doubled to account for fringe benefits and overhead). We estimate a burden to each State government of 5,089 hours at an estimated cost of $587,551.58 for State contracts and contractors ongoing reviews for oversight. Therefore, each State will incur a burden of 5,749 hours at an estimated cost of $670,693.58 ($66,513.60 + $14,599.20 + $2,029.20 + $587,551.58) in total for these finalized policies, and all 5 States will incur a total burden of 28,745 hours at an estimated cost of $3,353,468 (5 States × $670,693.58). We sought comment from State Exchanges on these burden estimates.

We recognize that some State Exchanges may decide to utilize DE entities already assisting consumers in the FFEs and SBE–FPs and encourage State Exchanges to leverage DE operational readiness demonstrated to participate in the FFEs or SBE–FPs when possible, so as to help minimize burden on both the State Exchanges that operate their own eligibility and enrollment platform and their DE entities.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates with modifications to the burden hours and number of entities subject to these information collection requirements. We summarize and respond to public comments received regarding this provision below.

Comment: One commenter suggested that the burden estimates are inappropriately based on the premise that States will implement DE programs in the same manner as the FFEs. One commenter suggested that the burden estimates could be substantially reduced if the State Exchanges leverage or choose to mirror the HHS requirements.

Response: We disagree with the comment that these burden estimates were inappropriately based on the premise that States will implement DE programs in the same manner as the FFEs. The nature of this policy requires a consideration of the baseline Federal consumer protection requirements, while accounting for the potential variation in the ultimate DE requirements determined by each State Exchange. These requirements will provide baseline consumer protections across the State Exchanges but also allows flexibility with regards to State Exchange implementation of DE requirements. Accordingly, States may implement more stringent or less stringent standards and oversight processes; these estimates intend to strike a balance between the Federal implementation and the varied hypothetical possibilities for a State's requirements and oversight process. We appreciate the comment that the burden estimates could be substantially reduced if the State Exchanges leverage the HHS requirements. We encourage State Exchanges to leverage the HHS requirements and believe the implementation costs for both State Exchanges and DE entities may be substantially reduced if the State Exchanges leverage the HHS requirements. However, we note the assumption that States can save money by mirroring HHS standards assumes that all entities participating have complied and met the HHS standards, as verified by HHS, and ignores the possibility that entities may participate in a given State's web-broker or DE entity program as a net new entity, with no experience or documented compliance at the Federal level. We have carefully considered this commenter's feedback and reduced relevant burden estimates for requirements where we believe there is a high likelihood that State Exchanges will adopt the same requirements as the FFE.

Comment: A few commenters provided comments related specifically to the portion of the burden estimate regarding costs for State Exchanges to implement DE programs. Both commenters noted that the cost estimates for States to implement this proposal are overstated and fail to incorporate the potential cost savings and additional user fee revenues that States could realize through utilization of DE entities, including reduced burdens on State call centers and State Exchanges. One commenter expressed concern that the burden estimates were based on salary information for Washington, DC, citing higher salaries for that locality as compared to employees in the majority of State Exchanges. This commenter requested clarification for how the estimated hours for contractor oversight of State Exchanges were determined.

Response: We acknowledge the concern that the burden estimates for State Exchanges to implement DE programs are overstated. As acknowledged above, this policy provides flexibility to State Exchanges in their implementation of DE programs. These burden estimates account for the possibility that State Exchanges may implement DE programs differing from the FFE program. We encourage State Exchanges to leverage the HHS requirements when developing their DE programs and we anticipate that doing so would substantially reduce the burden for State Exchanges to develop and implement these programs. In addition, we acknowledge the comment that DE programs may provide additional user fee revenues and cost savings to State Exchanges associated with reduced burdens on State call centers and State Exchanges. Although we acknowledge that there could be cost savings associated with implementing DE programs in State Exchanges, we have not conducted a detailed analysis on the cost savings associated with the implementation of DE programs in the FFE and, therefore, cannot quantify the extent of any such savings. Furthermore, these estimates are specific to defining the oversight policies and procedures, and the implementation of such oversight for web-brokers and DE entities under § 155.220 and § 155.221; these estimates are not intended to calculate the total cost—or savings—for any given State to implement a web-broker or DE program, including the costs of developing and maintaining the technical infrastructure to maintain a web-broker and DE entity program. However, we do recognize the potential for savings and are open to feedback as we continue to work with our State partners on implementation of these programs. We acknowledge the concern regarding the use of Washington, DC, labor rates in calculating these burden estimates. In the absence of a national average pay scale, we acknowledge there will be variations in regional pay scales among State Exchanges, including some which may be higher or lower than the rates used to calculate these estimates. With regards to the estimates for contractor oversight of State Exchanges, we are clarifying that these estimates were calculated by

[338] *Id.*

[339] *Id.*

[340] *Id.*

mapping labor for the relevant requirements to GS categories based on the applicable FFE contractor support labor costs and hours for the applicable requirements and estimated number of entities. We acknowledge that any given State may experience a higher or lower cost for implementing these programs depending on the extent (that is, scope and frequency) of the State's oversight mechanisms, the scope of the State's specific requirements for these programs, and the general quality and compliance posture of web-brokers or DE entities intending to participate in the State.

Comment: One supporting commenter provided comments related to the portion of the burden estimate regarding costs for DE entities to operate in State Exchanges. Specifically, this commenter provided detailed feedback on the estimated burden hours based on their experience as a DE entity operating in the FFEs. This included feedback on the burden associated with implementing § 155.221(j) and various web-broker requirements that are relevant to DE entities operating in the FFEs. This commenter suggested that the burden estimates should be limited to the number of primary EDE entities expected to participate in State Exchanges.

Response: We appreciate the feedback on these burden estimates from a DE entity currently operating in the FFEs. We recognize the value of feedback from an entity with experience implementing the FFE program requirements and we carefully considered this feedback and have adjusted the burden estimates where applicable. In making these adjustments, we considered that the commenter has considerable experience operating in the FFE. As the commenter acknowledged, other entities may have differing levels of technical expertise and capacity. We have accounted for the costs associated with implementing these requirements from the perspective of DE entities with limited experience. However, we agree that the burden may be substantially lower for DE entities with increased technical experience and capacity. In considering the feedback on these burden estimates, we note there were several assumptions made regarding the State Exchanges' provision of data to DE entities (for example, the provision of QHP data). These burden estimates account for a scenario where there may be variability between the format of data provided across State Exchanges. We encourage State Exchanges to leverage the data formats used in the FFEs and are committed to providing technical assistance to State Exchanges to facilitate such standardization. We agree with the commenter's suggestion that the burden estimates should be limited to the number of primary EDE entities expected to participate in State Exchanges. We have adjusted the burden estimates to reflect the current number of primary entities operating in the FFEs and to account for the possibility of new primary DE entities entering the State Exchanges.

H. ICRs Regarding Failure To File and Reconcile Process (45 CFR 155.305(f)(4))

We are finalizing amendments to § 155.305(f)(4) to provide that when an enrollee or their tax filer is identified as having FTR status for one-year State Exchanges must either notify the tax filer directly, and alert them of their FTR status, or send informative notices to the enrollee or their tax filer that provide information on the APTC reconciliation requirement, and lets the recipient know that they are at risk of being determined ineligible for APTC without containing protected FTI. This requirement will ensure that State Exchanges provide notifications, similar to how Exchanges on the Federal platform do, and that tax filers on State Exchanges are adequately educated on the requirement to file and reconcile. This final rule will impact State Exchange FTR noticing processes for PY 2025 and subsequent years. For State Exchanges, FTR will be conducted in the same manner it had previously been conducted with respect to collection of information, with minimal changes to the language of the Exchange application questions necessary to obtain relevant information; as such, we anticipate that the finalized amendment will not impact the existing information collection requirements (OMB control number: 0938–1191) or burden for consumers.

Under previous FTR policy, State Exchanges were already required to notify tax filers identified as FTR at a minimum of once per year. As such, we do not anticipate this requirement increasing State Exchanges' burden of noticing beyond their existing FTR processes. We sought comment on these assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

I. ICRs Regarding Verification Process Related to Eligibility for Enrollment in a QHP Through the Exchange (45 CFR 155.315(e))

We are finalizing several revisions to § 155.315(e) that will allow Exchanges to accept consumer attestation of incarceration status without further verification or, alternatively, to propose an alternative data source for incarceration verification for HHS approval. Exchanges that elect to verify incarceration status will continue to be required to use the DMI process if the data source provides a mismatch against the consumer attestation of incarceration status or other information provided by the applicant or in the records of the Exchange. Should a State Exchange choose to propose using an alternative electronic data source for verifying incarceration status, HHS will review such proposals for consistency with the finalized standard in § 155.315(e)(2).

Of the 18 State Exchanges (operating in 12 States and the District of Columbia) that have incarceration verification processes, 8 conduct incarceration verifications similar to the one used to date by Exchanges on the Federal platform, and 5 have connected to an individual State or local incarceration facility for verifications and have received approval to do so from HHS. Additionally, 3 States are currently in process of transitioning to State Exchanges for PY 2024 or beyond and may choose to connect to an alternative incarceration verification data source with HHS approval. Subtracting the 5 Exchanges with preexisting approvals, we anticipate 11 State Exchanges could connect to an alternative incarceration verification data source, should they assess that an alternative data source exists and want to continue verification of consumer incarceration status using it.

For the purposes of assessing whether an alternative data source should be used, we estimate that a Management Analyst will spend 20 hours, at an hourly rate of $91.62, to synthesize a cost-benefit analysis regarding whether the Exchange should continue to verify incarceration status using an approved data source instead of accepting a consumer's attestation that they are not incarcerated. If the Exchange finds a viable alternative data source and determines that it should be used, we anticipate that a Business Operations Specialist will take about 2 hours, at an hourly rate of $73.12, to submit a request for HHS approval. We also anticipate that it will take a Chief Executive equivalent for the Exchange 1 hour, at an hourly rate of $182.24, to approve the paperwork for submission to request HHS approval of the alternative incarceration data source. In total, the assessment of whether the Exchange should continue to verify incarceration status using an alternative data source instead of accepting

consumer attestation will take 20 hours at a cost of $1,832.40, and the process of approving and submitting a request for HHS approval will take 3 hours at a cost of $328.48. Therefore, the total one-time burden for each Exchange that elects to verify incarceration status using an HHS-approved data source in 2025 will be 23 hours at a cost of approximately $2,161, and the total burden across all 11 State Exchanges would be 253 hours at a cost of approximately $23,770.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

J. ICRs Regarding Eligibility Redetermination During a Benefit Year (45 CFR 155.330(d))

We are finalizing amendments to § 155.330(d) to require that Exchanges periodically examine available data sources described in §§ 155.315(b)(1) and 155.320(b) to identify changes related to death of an applicant on whose behalf APTC or CSRs are being provided. The Exchanges have developed electronic data exchanges to support obtaining this information to determine the applicant's eligibility at the point of application and could reuse those data exchanges here. Consequently, we estimate costs associated with this requirement to be minimal.

However, State Exchanges not already conducting Death PDM with the required frequency or not deemed in compliance with the finalized PDM requirements will be required to engage in IT system development activity to communicate with these programs and act on enrollment data either in a new way, or in the same way more frequently. Thus, there may be additional associated administrative cost for these State Exchanges to implement the finalized PDM requirement.

Based on experience with other PDMs, for each State Exchange not already conducting Death PDM at least twice a year, we estimate that it will take 40 hours by a Computer Systems Analyst at an hourly rate of $98.30 to implement this finalized provision, for a cost of $3,932 per State Exchange. Therefore, for all 11 State Exchanges not currently meeting the finalized requirement, we estimate a total burden of 440 hours at a cost of $43,252. We assume that this burden will be incurred primarily in 2025.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

K. ICRs Regarding Establishment of Exchange Network Adequacy Standards (45 CFR 155.1050)

The burden associated with subjecting QHP issuers in State Exchanges and SBE–FPs to time and distance standards as proposed at § 155.1050 is covered by the information collection currently approved under OMB control number 0938–1312 (CMS–10593). We note that we are also revising the information collection currently approved under OMB control number 0938–1415 (CMS–10803) regarding appointment wait time standards encompassed in previously finalized regulations at 45 CFR 156.230(a)(2)(B). We sought comment on these burden estimates. We did not receive any comments related to this collection.

Under § 155.1050(a)(2)(i)(A), we are finalizing that for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A).

Second, we are finalizing that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews prior to certifying any plan as a QHP, consistent with the reviews conducted by the FFEs under § 156.230. Specifically, we are finalizing at § 155.1050(a)(2)(i)(B) that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews to evaluate a plan's compliance with network adequacy standards under § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(2)(i)(A) prior to certifying any plan as a QHP, while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4). Under this policy, State Exchanges and SBE–FPs will be prohibited from accepting an issuer's attestation as the only means for plan compliance with network adequacy standards.

We are aware that some State Exchanges employ robust, quantitative network adequacy standards that differ from those used by the FFEs, but still ensure that QHPs provide consumers with reasonable, timely access to practitioners and facilities to manage their health care needs, consistent with the ultimate aim of these policies. Therefore, we are finalizing § 155.1050(a)(2)(ii) to provide that, for plan years beginning on or after January 1, 2026, HHS may grant an exception to the requirements described under § 155.1050(a)(2)(i) to a State Exchange or SBE–FP that demonstrates with evidence-based data, in a form and manner specified by HHS, that (1) the Exchange applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4); and (2) the Exchange evaluates whether plans comply with applicable network adequacy standards prior to certifying any plan as a QHP. In this final rule, for this exception process, we are clarifying that, for (1) above, issuers on the State Exchanges and SBE–FPs do not need to comply with the appointment wait time standards under § 156.230(a)(2)(i)(B).

Lastly, we are finalizing § 155.1050(a)(2)(i)(C) to provide that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must require that all issuers seeking certification of a plan as a QHP submit information to the Exchange reporting whether or not network providers offer telehealth services.

We estimate that the total annual burden associated with State Exchanges and SBE–FPs establishing and imposing the finalized network adequacy standards, conducting the network adequacy reviews, collecting telehealth information from issuers seeking QHP certification, and submitting any exception to be up to 900 hours. Assuming the compliance officer average hourly rate of $68.94 per hour, we estimate the cost of the data collection, operations, and maintenance pertaining to these requirements on each State Exchange and SBE–FP to be $62,046 per year (900 hours × $68.94 per hour). In total, for the 19 State Exchanges and 3 SBE–FPs anticipated to be operational in 2025, we estimate a burden of 19,800 hours (22 State Exchanges and SBE–FPs × 900 hours per Exchange) at a cost of $1,365,012 (22 State Exchanges and SBE–FPs × 900 hours per Exchange × $68.94 per hour).

We estimate that the burden for QHP issuers in State Exchanges and SBE–FPs to gather and submit the time and distance data, including any justification, to the respective State Exchanges or SBE–FPs will be 10 hours in total for each medical QHP issuer (a QHP issuer that is not an SADP issuer) and 2 hours in total for each SADP issuer submitted by a compliance officer at a rate of $68.94 per hour. The 10-hour estimate includes the burden associated with the requirement that all issuers seeking QHP certification submit

information to the State Exchange or SBE–FP about whether network providers offer telehealth services.

Approximately half of the parent companies of issuers on the State Exchanges and over two thirds of the parent companies of issuers on SBE–FPs offer Medicare Advantage plans, and Medicare Advantage offers a telehealth credit for network adequacy. Therefore, many more issuers on State Exchanges and SBE–FPs likely already have access to this information. We also believe that QHP issuers that do not currently collect this information may do so using the same means and methods by which they already collect information from their network providers relevant to time and distance standards and provider directories. For these reasons, we estimate that any additional burden resulting from the requirement that QHP issuers report whether each network provider is furnishing telehealth services would be minimal.

The requirement that all issuers seeking QHP certification submit information to the State Exchange or SBE–FP about whether network providers offer telehealth services will account for 3 of the total 10 hours we estimate for gathering and submitting the time and distance data to the respective State Exchange or SBE–FP for medical QHP issuers and 30 minutes of the total 2 hours we estimate for SADP issuers. We believe the cost estimates of 3 hours for medical QHP issuers and 30 minutes for SADP issuers to be a maximum and that the burden could be less to issuers that are already collecting telehealth data for other purposes.

We estimate that the total annual burden associated with QHP issuers in State Exchanges and SBE–FPs to gather and submit the time and distance and telehealth data to the respective State Exchanges or SBE–FPs for up to 149 medical QHP issuers in State Exchanges and SBE–FPs would be up to 1,490 hours (10 hours × 149 medical QHP issuers). Assuming the compliance officer average hourly rate of $68.94 per hour, we estimate that the cost of gathering and submitting this network adequacy data for an individual medical QHP issuer could be up to $689.40 (10 hours × $68.94 per hour), and for all 149 medical QHP issuers in State Exchanges and SBE–FPs, up to $102,720.60 (149 medical QHP issuers × 10 hours per issuer × $68.94 per hour). We estimate that the total annual burden associated with this requirement for 89 SADP issuers in State Exchanges and SBE–FPs will be up to 178 hours (2 hours × 89 SADP issuers). Assuming the compliance officer average hourly rate of $68.94 per hour, we estimate that the cost of gathering and submitting the network adequacy data for an individual SADP could be up to $137.88 (2 hours × $68.94 per hour), and for all 89 SADP issuers in State Exchanges and SBE–FPs, up to $12,271.32 (89 SADP issuers × 2 hours per issuer × $68.94 per hour). We estimate the total annual burden associated with this finalized requirement across both medical QHP and SADP issuers in State Exchanges and SBE–FPs beginning in 2025 will be approximately $114,992.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the establishment of Exchange network adequacy standards policy below.

Comment: A few commenters expressed opposition to the collection of information about which providers offer telehealth services indicating that the proposed rule underestimated the burden of this proposal and that the information would not capture the availability of telehealth services.

Response: We believe that the telehealth reporting standards, pursuant to which issuers in State Exchanges and SBE–FPs must indicate whether each network provider offers telehealth services with the options ''Yes,'' ''No,'' or ''Requested information from the provider, awaiting their response,'' would not require extensive administrative time to gather. Approximately half of the parent companies of issuers on the State Exchanges and over two thirds of the parent companies of issuers on SBE–FPs offer Medicare Advantage plans, and Medicare Advantage offers a telehealth credit for network adequacy. Therefore, many more issuers on State Exchanges and SBE–FPs likely already have access to this information. We also believe that QHP issuers that do not currently collect this information may do so using the same means and methods by which they already collect information from their network providers relevant to time and distance standards and provider directories. For these reasons, we estimate that any additional burden resulting from the requirement that QHP issuers report whether each network provider is furnishing telehealth services would be minimal.

We stated in the proposed rule (88 FR 82591, 82638 through 82639) that this data would be for informational purposes, would be intended to help inform the future development of telehealth standards, and would not be displayed to consumers. We believe that the above-described telehealth reporting standards support these objectives by providing State Exchanges and SBE–FPs with a general picture regarding the availability of telehealth services in their State. Additionally, at this time, since this data will not be displayed to consumers, it is not necessary for State Exchanges and SBE–FPs to collect more granular telehealth data from their issuers.

L. ICRs Regarding the State Selection of EHB-Benchmark Plans for Plan Years Beginning On or After January 1, 2026 (45 CFR 156.111)

The existing OMB approval (0938–1174) PRA package, for which we are seeking a renewal for use beginning in March 2024, would remain in effect until the amendments to § 156.111 finalized in this rule would come into effect.

We are finalizing several revisions to § 156.111 that will reduce the burden associated with State selection of EHB-benchmark plans. For plan years beginning on or after January 1, 2026, we are finalizing revisions to the standards for State selection of EHB-benchmark plans at § 156.111 to consolidate the options for States to change EHB-benchmark plans at § 156.111(a); revisions to the scope of benefit requirements at § 156.111(b)(2); and revisions to § 156.111(e)(3) to require States to submit a formulary drug list as part of their application to change EHB-benchmark plans only if the State is seeking to change their prescription drug EHB. We are also finalizing revisions to the actuarial certification requirements at § 156.111 to reflect the finalized scope of benefit changes. The changes to § 156.111 will first be applicable during the EHB-benchmark plan selection cycle in 2024 and the anticipated reduction in burden to States will begin to be realized at that time.

The changes to § 156.111 will lead to an overall reduction in burden on States to change their EHB-benchmark plans in accordance with the revisions to § 156.111. The revisions to § 156.111 will remove the requirement that States report which option under § 156.111(a) they are using as a basis to change their EHB-benchmark plans, their methodology for confirming compliance with the generosity standard at current § 156.111(b)(2)(ii), and the submission of a formulary drug list under § 156.111(e)(3) unless the State is seeking to make changes to their prescription drug EHB. We will also change the information States submit to HHS to confirm compliance with the scope of benefit requirements at

§ 156.111(b)(2), for which we estimate an overall reduction in burden.

These policies will not change the number of documents States will be required to submit to change their EHB-benchmark plans under § 156.111(e)(3), unless the State is not seeking to make changes to its prescription drug EHB, in which case, the State will not be required to submit a formulary drug list as specified in § 156.111(e)(3). In addition, a response will not be required from all States under current § 156.111 and its finalized revisions. Only States choosing to modify the State's EHB-benchmark plan will need to submit this information to HHS.

Since finalizing the addition of § 156.111 in the 2019 Payment Notice, between one and three States have changed their EHB-benchmark plan each year between 2019 and 2023. While we anticipate that the finalized revisions to § 156.111 will reduce overall burden on States and incentivize more frequent changes to EHB-benchmark plans, we anticipate that at most 5 States will choose to make a change to their EHB-benchmark plans in any given year (15 States over 3 years within the authorization of this ICR).

To change an EHB-benchmark plan, a State currently provides confirmation that the State's EHB-benchmark plan selection complies with certain requirements, including those under § 156.111(a), (b), and (c). This information collection will be revised under the finalized policies in this rule. To comply with the finalized requirement, we estimate that a financial examiner will require 4 hours (at a rate of $79.04 per hour) to fill out, review, and transmit a complete and accurate document. We estimate that it will cost each State approximately $316.16 to meet the reporting requirement, with a total annual burden for all 5 States of 20 hours and an associated total cost of $1,580.80.

Section 156.111(e)(2) currently requires States to submit an actuarial certification and associated actuarial report of the methods and assumptions when selecting options under § 156.111(a). Presently, before compiling this report, States must consider which of the options provided at current § 156.111(a) best facilitate their intended EHB-benchmark changes. This deliberation often involves both research and discussion within the State and between the State and HHS. The finalized consolidation of the options currently available at § 156.111(a) into one overarching approach for EHB-benchmark plan updates will eliminate the need for, and time spent by, States contemplating the merits of one option or another. This actuarial certification and associated actuarial report must also demonstrate compliance with section § 156.111(b)(2)(i), which requires a State's EHB-benchmark plan to provide a scope of benefits that is equal in scope to the scope of benefits under one of the typical employer plans at § 156.111(b)(2)(i)(A) and (B). While the finalized revisions to § 156.111(b)(2)(i) will still require a State's EHB-benchmark plan to provide benefits that are equal in scope to the scope of benefits under a typical employer plan, they will also allow a State to select any scope of benefits that is as or more generous than the scope of benefits in the least generous plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), and as or less generous than the scope of benefits in the most generous plan in the State (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), among the plans currently defined at § 156.111(b)(2)(i)(A) and (B). We anticipate that these revisions will substantially reduce the burden on States to perform the required actuarial analyses. Under this revision, we anticipate that a State will typically only need to perform three actuarial analyses to determine the scope of benefits in the least and most generous plans among the plans currently defined at § 156.111(b)(2)(i)(A) and (B), and the scope of benefits in the State's new EHB-benchmark plan. Under current regulation, a State may need to perform an indeterminate number of actuarial analyses of the plans defined at § 156.111(b)(2)(i)(A) and (B) until the State identifies a plan with a scope of benefits equal to the State's EHB-benchmark plan. This revision will significantly reduce the likelihood that a State would need to perform as many actuarial analyses. Accordingly, we anticipate a reduction in the estimated burden on States to perform the actuarial analysis to confirm compliance with § 156.111(b)(2)(i).

This actuarial certification and associated actuarial report must also demonstrate compliance with § 156.111(b)(2)(ii), which currently requires a State's EHB-benchmark plan to not exceed the generosity of the most generous among a set of comparison plans. For benefit years beginning on or after January 1, 2026, we are finalizing the removal of this requirement and will revise this estimate to reflect a reduced burden on States that would no longer need perform the actuarial analyses required to confirm compliance with § 156.111(b)(2)(ii).

The actuarial certification that will be collected under this ICR will be required to include an actuarial report that complies with generally accepted actuarial principles and methodologies. This estimate includes complying with all applicable actuarial standards of practice (ASOPs) (including ASOP 41 on actuarial communications). For example, ASOP 41 on actuarial communications includes disclosure requirements, including those that apply to the disclosure of information on the methods and assumptions being used for the actuarial certification and report. The actuarial certification for this requirement currently includes an attestation that the standard actuarial practices have been followed or that exceptions have been noted. The signing actuary is required to be a Member of the American Academy of Actuaries. These requirements will continue to apply with this finalized policy.

We estimate that an actuary, who is a member of the American Academy of Actuaries, will be required to complete 12 hours of work (at a rate of $109.60 per hour) on average for § 156.111(e)(2). This will include the certification and associated actuarial report from an actuary to affirm, in accordance with generally accepted actuarial principles and methodologies that the State's EHB-benchmark plan must provide a scope of benefits that is equal to the scope of benefits provided under a typical employer plan. For these calculations, the actuary will need to conduct the appropriate calculations to create and review an actuarial certification and associated actuarial report, including minimal time required for recordkeeping. The precise level of effort for the actuarial certification and associated actuarial report under § 156.111(e)(2) will likely vary depending on the State's approach to its EHB-benchmark plan and this certification requirement, but we are estimating 12 hours of work for the actuary to complete the actuarial certification and associated report in this final rule in recognition that the definition of typical employer plan may require the actuary to determine whether the typical employer plan meets minimum value requirements. We estimate that it will cost each State approximately $1,315.20 to meet this reporting requirement, with a total annual burden for all 5 States of 60 hours and an associated total cost of $6,576.

We estimate that a financial examiner will require 1 hour (at a rate of $79.04 per hour) to review, combine, and

electronically transmit these documents to HHS, as part of a State's EHB-benchmark plan submission. We estimate that each State will incur a burden of 1 hour with an associated cost of $79.04 with a total annual burden for 5 States of 5 hours at associated total cost of $395.20.

We require at § 156.111(e)(3) that each State seeking to make a change to its EHB-benchmark plan submit its new EHB-benchmark plan documents. The level of effort associated with this requirement could depend on the State's selection of the EHB-benchmark plan options under the regulation at § 156.111(a). However, for the purposes of this estimate, we estimate that it will require a financial examiner (at a rate of $79.04 per hour) 12 hours on average to create, review, and electronically transmit the State's EHB-benchmark plan document that accurately reflects the benefits and limitations, resulting in a burden of 12 hours and an associated cost of $948.48, with a total annual burden for all 5 States of 60 hours and an associated cost of $4,742.40. This estimate of 12 hours will also include the burden necessary for a State to submit a formulary drug list for the State's EHB-benchmark plan in a format and manner specified by HHS, in accordance with § 156.111(e)(3). However, we are finalizing revisions to § 156.111(e)(3) in this final rule to require a State to submit this formulary drug list only if the State is changing the prescription drug EHB. We do not anticipate that all States would change prescription drug EHB, so we anticipate this burden will be lower for some States. To collect the formulary drug list, the State will be required to use the template provided by HHS and must submit the formulary drug list as a list of RxNorm Concept Unique Identifiers (RxCUIs).

Section 156.111(e)(4) requires a State to submit the documentation necessary to operationalize the State's EHB-benchmark plan. This reporting requirement includes the EHB summary file that is currently posted on CCIIO's website and is used as part of the QHP certification process and is integrated into HHS' IT Build systems that feeds into the data that is displayed on *HealthCare.gov*.[341] We estimate that it requires a financial examiner 12 hours, on average, (at a rate of $79.04 per hour) to create, review, and electronically submit a complete and accurate document to HHS resulting in a burden of 12 hours and an associated cost of $948.48, with a total annual burden for all 5 States of 60 hours and an associated cost of $4,742.40.

We estimate that the total number of respondent States would be 5 per year, for a total yearly burden of 205 hours [342] and an associated cost of approximately $18,036 [343] to meet these reporting requirements.

We sought comment on these burden estimates.

We did not receive any comments on ICRs regarding the amendments to State selection of EHB-benchmark plans. We are finalizing these estimates as proposed.

M. ICRs Regarding Non-Standardized Plan Option Limits (45 CFR 156.202)

As was previously discussed in the preamble to this finalized rule, we are finalizing permitting issuers to offer non-standardized plan options in excess of the limit of two per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area for PY 2025 and subsequent years, if issuers demonstrate that these additional non-standardized plans beyond the limit at § 156.202(b) have specific design features that would substantially benefit consumers with chronic and high-cost conditions and meet other specified requirements.

Specifically, at § 156.202(d), for PY 2025 and subsequent years, an issuer may offer additional non-standardized plan options for each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area if it demonstrates that these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area.

We finalized several specifications for issuers seeking to utilize this exceptions process at § 156.202(d)(1) through (6). Specifically, at paragraph (d)(1), the 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions will be evaluated at the level of total out-of-pocket costs for the treatment of the chronic and high-cost condition for a population of enrollees with the relevant chronic and high-cost condition. At paragraph (d)(2), the reduction must not be limited to a part of the year, or an otherwise limited scope of benefits. At paragraph (d)(3), the reduction in cost sharing for these benefits cannot be conditioned on a consumer having a particular diagnosis.

At paragraph (d)(4), the required reduction in cost sharing only applies to the standard variant of the plan for which an issuer seeks an exception, and not to the income-based cost-sharing reduction plan variations required by § 156.420(a), nor to the zero and limited cost sharing plan variations required by § 156.420(b). At paragraph (d)(5), issuers are limited to one exception per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, for each chronic and high-cost condition. At paragraph (d)(6), the chronic and high-cost conditions that may qualify an issuer for this exception will be determined by HHS. Refer to § 156.202 of the preamble to this rule for a more detailed discussion regarding these requirements.

Additionally, at § 156.202(e), an issuer that seeks to utilize this exceptions process is required to submit a written justification in a form and manner and at a time prescribed by HHS. At paragraph (e)(1), the written justification must identify the specific chronic and high-cost condition that its additional non-standardized plan option offers substantially reduced cost sharing for, in accordance with the definition of ''cost sharing'' at § 156.20.

At paragraph (e)(2), the written justification must identify which benefits in the Plans and Benefits Template are discounted to provide reduced treatment-specific cost sharing for individuals with the specified chronic and high-cost condition. These discounts must be relative to the treatment-specific cost sharing for the same corresponding benefits in the issuer's other non-standardized plan offerings in the same product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area. For the purposes of this standard, treatment specific cost sharing consists of the costs for obtaining services that pertain to the treatment of a particular chronic and high-cost disease—but not the costs for obtaining services that do not pertain to the treatment of the relevant condition. The issuer must identify all services for which the benefits substantially reduce cost sharing in the Plans and Benefits Template. These benefits must

[341] Information on Essential Health Benefits (EHB) Benchmark Plans. Accessed at *https://www.cms.gov/CCIIO/Resources/Data-Resources/ehb.html.*

[342] This is calculated as follows: (29 hours for the financial examiner + 12 hours for the actuary) × 5 States = 205 hours.

[343] This is calculated as follows: ($11,460.80 for the financial examiner + $6,576.00 for the actuary) × 5 States = $18,036.80.

encompass a complete list of relevant services pertaining to the treatment of the relevant condition.

At paragraph (e)(3), the written justification must explain how the reduced cost sharing for these services pertains to clinically indicated guidelines and a representative treatment scenario for treatment of the specified chronic and high-cost condition (and include any relevant studies, guidelines, or supplementary documents to support the application, as applicable). For the purposes of this standard, a representative treatment scenario is an annual course of treatment for a chronic and high-cost condition.

At paragraph (e)(4), the written justification must include a corresponding actuarial memorandum that explains the underlying actuarial assumptions made in the design of the plan the issuer is requesting to except. In this memorandum, an issuer must demonstrate how the benefits that are discounted to provide reduced treatment-specific cost sharing of at least 25 percent identified at § 156.202(e)(2) for the treatment of the condition identified at § 156.202(e)(1) under the excepted plan compare to the identified in-limit offering in the same product network type, metal level, inclusion of dental and/or vision coverage, and service area. This demonstration must specifically be in reference to the specific population that would be seeking treatment for the relevant condition and not the general population. This memorandum must also include an actuarial opinion confirming that this analysis was prepared in accordance with the appropriate Actuarial Standards of Practice and the profession's Code of Professional Conduct.

In order for an issuer to complete the necessary documentation to submit a request to be excepted from the non-standardized plan option limit at § 156.202(b) in accordance with the requirements at § 156.202(d) through (e), we estimate that it will take an actuary (OES occupational code 15–2011) 5 hours annually at a median hourly cost of $109.60 per hour (amounting to $548 annually) to create a new plan design with sufficiently differentiated cost sharing and to set the premium rate for this plan; a general internal medicine physician (OES occupational code 29–1216) 2 hours annually at a median hourly cost of $206.22 (amounting to $412.44 annually) to complete the justification form for this exceptions process; and a general and operations manager (OES occupational code 11–1021) 10 hours annually at a median hourly cost of $94.32 per hour (amounting to $943.20 annually) to review and submit the justification form, including all required data, as part of an issuer's portfolio of plan offerings that it seeks certification of during QHP certification.

Altogether, we estimate a total burden of 17 hours at a cost of $1,903.64 per issuer annually to create a new non-standardized plan option that substantially benefits consumers with a chronic and high-cost condition, and to submit a request for that new non-standardized plan option to be excepted from the non-standardized plan option limit. We do not anticipate that issuers will seek to have more than one additional non-standardized plan option excepted from the limit. We further estimate that approximately 50 FFE and SBE–FP issuers (of the 228 issuers based on current PY 2024 plan offering data, amounting to approximately 22 percent) will request to be excepted from the non-standardized plan option limit in order to offer these additional plans annually, at a total burden of 850 hours and associated cost of $95,182 for all issuers annually. We estimate that 50 issuers will submit a request to be excepted from the non-standardized plan option limit since we anticipate that most issuers would believe that the burden of creating and certifying additional plans intended to benefit a comparatively small population of consumers would outweigh the benefit of doing so.

We sought comment on these burden estimates.

We did not receive any comments on ICRs associated with non-standardized plan option limit exceptions.

N. Summary of Annual Burden Estimates for Finalized Requirements

TABLE 15—FINALIZED ANNUAL RECORDKEEPING AND REPORTING REQUIREMENTS

Regulation section(s)	OMB Control No.	Number of respondents	Number of responses	Burden per response (hours)	Total annual burden (hours)	Labor cost of reporting ($)	Total cost ($)
45 CFR 155.1050	0938–XXXX	22	22	900	19,800	1,365,012	1,365,012
45 CFR 155.220	0938–XXXX	20	20	505	10,100	860,380	860,380
45 CFR 155.220	0938–XXXX	5	5	4,008	20,040	2,346,128	2,346,128
45 CFR 155.221	0938–XXXX	20	20	1,397	17,601	1,233,262	1,233,262
45 CFR 155.221	0938–XXXX	5	5	5,749	28,745	3,353,468	3,353,468
45 CFR 155.221(b)(6)	0938–XXXX	100	100	33	3,125	245,290.50	245,290.50
45 CFR 155.221(b)(6)	0938–XXXX	20	20	165	3,105	247,358.70	247,358.70
45 CFR 155.315	0938–XXXX	11	11	23	253	23,770	23,770
45 CFR 155.330(d)	0938–XXXX	11	11	40	440	43,252	43,252
45 CFR 156.111	0938–1174	5	5	41	205	18,036	18,036
45 CFR 156.202	0938–XXXX	50	50	17	850	95,182	95,182
Total		269	269	12,878	104,264	9,832,523	9,832,523

The following information collection requests will be submitted for OMB approval outside of this rulemaking, through separate **Federal Register** notices: Exchange requirements for web-brokers (§§ 155.220, 155.221, 155.315) and non-standardized plan options (§ 156.202).

V. Regulatory Impact Analysis

A. Statement of Need

This rule finalizes several HHS risk adjustment updates, such as to use the 2019, 2020, and 2021 data for recalibration of the HHS risk adjustment models for benefit year 2025; to update and retain the AI/AN CSR adjustment factors for benefit year 2025 and beyond, unless changed through notice-and-comment rulemaking; to establish the risk adjustment user fee for benefit year 2025; and to give HHS the authority to require corrective action plans for certain observations identified as a result of risk adjustment audits for the high-cost risk pool. The rule further finalizes State Exchange and agent, broker, web-broker, and DE entity standards; requiring State Exchanges and State Medicaid and CHIP agencies

to pay to access and use optional CSI data from the Hub for income verification; eligibility and auto re-enrollment standards; open enrollment period and special enrollment period standards; and permitting enrollees to retroactively terminate their enrollment in a QHP through the Exchange when the enrollee enrolls in Parts A or B Medicare retroactively effective to the date Medicare coverage begins. Additionally, the rule finalizes the FFE and SBE–FP user fee rates for the 2025 benefit year, as well as EHB-benchmark plan selection updates, other EHB updates, minor updates to the standardized plan options for PY 2025, an exceptions process for issuers to offer additional non-standardized plan options in excess of the limit of two for PY 2025, Consumer Operated and Oriented Plan (CO–OP) loan term revisions, and modifications to section 1332 waiver implementing regulations governing public hearing procedures.

B. Overall Impact

We have examined the impacts of this rule as required by Executive Order 12866 on Regulatory Planning and Review (September 30, 1993), Executive Order 13563 on Improving Regulation and Regulatory Review (January 18, 2011), Executive Order 14094 entitled ''Modernizing Regulatory Review'' (April 6, 2023), the Regulatory Flexibility Act (RFA) (September 19, 1980, Pub. L. 96–354), section 1102(b) of the Act, section 202 of the Unfunded Mandates Reform Act of 1995 (March 22, 1995; Pub. L. 104–4), and Executive Order 13132 on Federalism (August 4, 1999), and the Congressional Review Act (5 U.S.C. 804(2))

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). The April 6, 2023 Executive Order on Modernizing Regulatory Review [344] amends Section 3(f) of Executive Order 12866 to define a ''significant regulatory action'' as an action that is likely to result in a rule that may: (1) have an annual effect on the economy of $200 million or more (adjusted every 3 years by the Administrator of OMB's Office of Information and Regulatory Affairs (OIRA) for changes in gross domestic product), or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, territorial, or tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise legal or policy issues for which centralized review would meaningfully further the President's priorities or the principles set forth in the Executive Order, as specifically authorized in a timely manner by the Administrator of OIRA in each case.

A regulatory impact analysis (RIA) must be prepared for significant rules. OMB's OIRA has determined that this rulemaking is 'significant' as measured by the $200 million threshold under section 3(f)(1). We have prepared an RIA that to the best of our ability presents the costs and benefits of the rulemaking. OMB has reviewed these finalized regulations, and the Departments have provided the following assessment of their impact.

C. Impact Estimates of the Payment Notice Provisions and Accounting Table

As required by OMB Circular A–4 (available at *https://www.whitehouse.gov/wp-content/uploads/legacy_drupal_files/omb/circulars/A4/a-4.pdf*.), we prepared an accounting statement in Table 16 showing the classification of the impact associated with the provisions of this final rule.

This final rule implements standards for programs that will have numerous effects, including providing consumers with access to affordable health insurance coverage, reducing the impact of adverse selection, and stabilizing premiums in the individual and small group (including merged) health insurance markets and in Exchanges. We are unable to quantify all the benefits and costs of this final rule. The effects in Table 16 reflect qualitative assessment of impacts and estimated direct monetary costs and transfers resulting from the provisions of this final rule for health insurance issuers and consumers. The annual monetized transfers described in Table 16 include changes to costs associated with the risk adjustment user fee paid to HHS by issuers.

TABLE 16—ACCOUNTING TABLE

Benefits:	Estimate	Year dollar	Discount rate	Period covered
Annualized Monetized ($/year)	$25.79 million	2023	7 percent	2024–2028
	26.32 million	2023	3 percent	2024–2028

Quantitative:

- Annual cost savings to State Exchanges of approximately $20,317,000 beginning in 2025 associated with the policy to permit Exchanges to accept consumer incarceration attestations without further verification.
- Annual cost savings to the Federal Government of approximately $570,000 beginning in 2025 due to the policy to stop generating incarceration DMIs and thereby stop paying the PUPS annual maintenance and transaction fees for the purposes of verification incarceration status for QHP eligibility.
- Annual cost savings to the Federal Government of approximately $12.5 million associated with the policy to conduct an additional Death PDM check annually beginning in 2025.

Qualitative:

- Increased State flexibility with respect to determining the effective date of eligibility for enrollment in a standard health plan for purposes of a BHP.

[344] Executive Order 14094. *https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/06/executive-order-on-modernizing-regulatory-review/.*

TABLE 16—ACCOUNTING TABLE—Continued

- Improved transparency as a result of the requirement that States seeking to transition to a State Exchange must provide the public with a notice and copy of its State Exchange Blueprint application at the time of submission to HHS for approval, and conduct periodic public engagements whereby interested parties can learn about the State's intent to transition, as well as a State's progress toward transitioning. Although, historically, States that have transitioned to State Exchanges conducted some level of public engagements that would meet what has been finalized, they have done so voluntarily, so this policy will set a clear expectation moving forward for all States that intend to establish and operate a State Exchange.
- Improved consumer experience associated with the requirement that Exchange call centers must provide consumers with access to a live call center representative during the Exchanges' published hours of operations who must be able to assist consumers with submitting their application for QHP coverage. Although all current Exchanges meet this requirement, there may be States transitioning to State Exchanges in the future that would not consider offering live call center representatives in the absence of this finalized amendment. This policy will set a clear expectation moving forward for all States that intend to establish and operate a State Exchange.
- Improved consumer experience and access to accurate insurance information associated with the requirement that all Exchanges must have a centralized eligibility and enrollment platform on its website. Although all current Exchanges meet this requirement, there may be States transitioning to State Exchanges in the future that would not consider operating a centralized eligibility and enrollment platform in the absence of this finalized amendment. This policy will set a clear expectation moving forward for all States that intend to establish and operate a State Exchange.
- Increased transparency for agents, brokers, and web-brokers by specifying who will be reviewing their reconsideration requests.
- Improved consumer experience on non-Exchange websites by requiring DE entities to implement *HealthCare.gov* and State Exchange website display changes that enhance the consumer experience, simplify the plan selection process, and increase consumer understanding of plan benefits, cost-sharing responsibilities and eligibility for financial assistance.
- Reduced burdens and barriers to care for applicants as a result of the policy to permit Exchanges to accept incarceration attestations without further verification.
- Improved continuity of coverage for enrollees due to the requirement that Exchanges must automatically re-enroll enrollees in catastrophic coverage into QHP coverage for the coming plan year.
- Reduced consumer confusion and increased consumer access to assisters as a result of the requirement that State Exchanges generally must adopt an open enrollment period that begins on November 1 of the calendar year preceding the benefit year and ends no earlier than January 15 of the applicable benefit year, with the option to extend the open enrollment period beyond January 15.
- Reduced consumer confusion and coverage gaps due to the policy to align the effective dates of coverage after selecting a plan during certain special enrollment periods across all Exchanges.
- Reduced overlaps in coverage and premium payments for Exchange enrollees who retroactively enroll in Medicare Part A or B as a result of the policy to permit Exchange enrollees to retroactively terminate Exchange coverage back to the date in which they retroactively enroll in Medicare Part A or B, but no more than 6 months before the date that retroactive termination is requested.
- Reduced costs for States to perform actuarial analyses to confirm compliance of EHB-benchmark plans with scope of benefit requirements at § 156.111(b)(2).
- Reduced coverage barriers to expanding access to adult dental benefits, improved State flexibility to add benefits to improve adult oral health, and promotion of health equity associated with the policy to remove the prohibition on including routine non-pediatric dental services as an EHB.
- Increased issuer flexibility in plan design as a result of the finalized exceptions process to allow issuers to offer additional non-standardized plan options in excess of the limit of two per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, if specified requirements are met.
- Streamlined payments and collections processes and limited administrative burden for operating HHS programs due to the policy to align netting regulations at § 156.1215 with the policies proposed in the Federal Independent Dispute Resolution (IDR) Process Administrative Fee and Certified IDR Entity Fee Ranges proposed rule.

Costs:	Estimate	Year dollar	Discount rate	Period covered
Annualized Monetized ($/year)	$10.00 million	2023	7 percent	2024–2028
	$10.00 million	2023	3 percent	2024–2028

Quantitative:

- Cost to issuers being audited for high-cost risk pool payments of approximately $25,078 to complete, submit to HHS, and implement corrective action plans for certain high-cost risk pool audit observations for each benefit year being audited, if required by HHS.
- One-time cost in PY 2025 to web-brokers operating in State Exchanges of approximately $860,380 due to the policy to ensure agents, brokers, and web-brokers operating in these State Exchanges are meeting certain requirements applicable in the FFE and SBE–FPs.
- Costs to States of $2,346,128 associated with the policy that agents, brokers, and web-brokers operating in State Exchanges meet certain requirements applicable in the FFEs and SBE–FPs.
- Costs to DE entities operating in FFE and SBE–FP States of approximately $240,120 annually beginning in 2025 as a result of the requirement that DE entities implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards.
- Costs to DE entities participating in State Exchanges of approximately $247,359 annually beginning in 2025 associated with implementing display changes and submitting requests to deviate from the standards defined by the State Exchange.
- Costs to DE entities operating in FFE and SBE–FP States of approximately $5,171 to submit a request to deviate from the display approach adopted by *HealthCare.gov* standards defined by HHS annually beginning in 2025.
- Costs to States of $3,353,468 associated with the policy that DE entities operating in State Exchanges meet certain requirements applicable in the FFEs and SBE–FPs, including the costs for States associated with policy surrounding DE entities operating in State Exchanges regarding implementing display changes and reviewing associated deviation requests if the State Exchange permits deviations.
- One-time cost in PY 2025 to DE entities in State Exchanges of approximately $1,233,262 to comply with the policy to add language to ensure DE entities operating in these State Exchanges are meeting certain requirements applicable in the FFE and SBE–FPs.
- One-time cost in PY 2025 to State Exchanges of $23,770 to conduct an analysis of whether to accept consumer attestation of incarceration status or identify an alternative data source to verify incarceration status and to make changes to their eligibility systems and processes to either accept consumer attestation or use an alternative data source to verify incarceration status.

TABLE 16—ACCOUNTING TABLE—Continued

- One-time cost to HHS of $2,557,077 in 2024 to build the structure and set up operations for the purposes of distinguishing costs of accessing CSI data through the VCI Hub service between the State Exchange and State Medicaid agency.
- Costs to States of $867,539 in 2024 and $1.7 million annually beginning in fiscal year 2025 associated with the administrative fee to account for any direct or indirect costs to HHS of making CSI income data accessed through the VCI Hub service available to Exchanges and State Medicaid and CHIP agencies.
- One-time cost to 1 to 3 States with State Exchanges that currently have one Hub connection shared between the State Exchange and Medicaid, of approximately $3 to 6 million in 2024 (averaged to approximately $4.5 million for purposes of this final rule) if they elect to build a second, separate Hub connection for the purposes of distinguishing costs of accessing CSI data through the VCI Hub service between the State Exchange and State Medicaid agency. Should any of these States elect to build a second Hub connection, the State will determine if the State Exchange or Medicaid agency will finance the implementation and operational costs associated with the second Hub connection.
- One-time cost in 2025 of approximately $43,252 to 11 State Exchanges that are not currently meeting the requirement to conduct Death PDM at least twice a year.
- Costs to 5 States per year of approximately $18,036 to comply with the policy regarding the State selection of EHB-benchmark plans.
- Costs to 50 issuers of approximately $95,182 annually to complete the exceptions process in order to offer one additional non-standardized plan option in excess of the non-standardized option plan limit of two for PY 2025 and subsequent years.
- Costs to QHP issuers in State Exchanges and SBE–FPs of approximately $114,992 annually beginning in 2025 associated with the network adequacy policies in this final rule.
- Costs to State Exchanges and SBE–FPs of approximately $1,365,012 annually beginning in 2025 associated with the network adequacy policies in this final rule.
- Costs to HHS per year of approximately $58,923 to conduct an additional check for deceased enrollees associated with the requirement that Exchanges must conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage beginning with the 2025 calendar year.
- One-time cost in 2025 of $1,540,000 to HHS to modify the Federal platform's current incarceration verification processes for the purposes of verifying eligibility for QHP, and to update the Federal platform's system logic for HHS to stop sending incarceration verification requests to PUPS.

Qualitative:

- Increased costs for consumers annually, to the extent that the policies to address State-mandated benefits and the process to change EHB-benchmark plans incentivize States to update and modernize the EHB with additional benefits, including routine non-pediatric dental services. Such added benefits could lead to approximately a 1% increase in second lowest cost silver plan premiums in approximately 5 States annually, raising premium costs for consumers.
- Increased administrative burden to States and issuers to develop criteria used to select a consumer representative for the P&T committee, to create or revise standard operating procedures for the committee, as well as for any additional training.

Transfers:	Estimate	Year dollar	Discount rate	Period covered
Annualized Monetized ($/year)	$1.42 billion	2023	7 percent	2024–2028
	$1.48 billion	2023	3 percent	2024–2028

Quantitative:

- Estimated transfers of costs from the Federal Government to States of approximately $72 million to $122 million per year beginning in 2024 (averaged to $100 million for purposes of this final rule) by requiring State Exchanges and State Medicaid agencies to pay for their use of the optional CSI income data accessed through the VCI Hub service.
- Reduction in risk adjustment user fee transfers from issuers to the Federal Government of approximately $11 million for benefit year 2025 compared to the prior benefit year.
- Reduction in FFE and SBE–FP user fee rates transfers from issuers to the Federal Government of approximately $340 million for benefit year 2025 compared to the prior benefit year.
- Estimated increased APTC outlays from the Federal Government to issuers of $2 billion to $3 billion (averaged to $2.5 billion for purposes of this final rule) annually beginning in 2026 associated with the policy to remove the limitation that the 150 percent FPL SEP be available only to a consumer whose applicable percentage, which is used to determine the amount of the consumer's premium not covered by APTC, is zero percent.

Qualitative:

- Increased APTC outlays from the Federal Government for APTC to the extent that the policies to address State-mandated benefits and the process to change EHB-benchmark plans incentivize States to update and modernize the EHB with additional benefits, including routine non-pediatric dental services. Such added benefits could lead to an estimated 1% increase in second lowest cost silver plan premiums in an estimated 5 States annually, necessitating increased outlays in the form of APTC.
- Increase in the overall absolute value of risk adjustment State transfers calculated under the State payment transfer formula of approximately 8 percent in Oklahoma, 2.5 percent in Alaska, 2 percent in Montana, and less than 0.5 percent in South Dakota and North Dakota as a result of the policy to recalibrate the CSR adjustment factors for AI/AN plan variant enrollees.

TABLE 17—ESTIMATED FEDERAL GOVERNMENT OUTLAYS AND RECEIPTS FOR THE HHS RISK ADJUSTMENT AND REINSURANCE PROGRAMS FROM FISCAL YEAR 2025–2029, IN BILLIONS OF DOLLARS [345]

Year	2025	2026	2027	2028	2029	2025–2029
HHS Risk Adjustment and Reinsurance Program Payments	8	9	10	10	10	47
HHS Risk Adjustment and Reinsurance Program Collections	9	10	10	10	10	49

Note: HHS risk adjustment program payments and receipts lag by one quarter. Receipt will fully offset payments over time. Source: Congressional Budget Office. Federal Subsidies for Health Insurance Coverage for People Under Age 65: CBO and JCT's May 2023 Baseline Projections. Table 2. May 2023. *https://www.cbo.gov/system/files/2023-05/51298-2023-05-healthinsurance.pdf.*

1. Finalized Amendments to Normal Public Notice Requirements (31 CFR 33.112, 31 CFR 33.120, 45 CFR 155.1312, and 45 CFR 155.1320)

In this final rule, the Departments are finalizing modifications to the section 1332 waiver implementing regulations to set forth flexibilities in the public notice requirements and post-award public participation requirements for section 1332 waivers. However, this final rule does not alter any of the requirements related to section 1332 waiver applications, compliance and monitoring, or evaluation in a way that will create any additional costs or burdens for States submitting proposed waiver applications or those States with approved waiver plans that have not already been captured in prior burden estimates. The Departments are of the view that both States with approved section 1332 waivers and States that apply for section 1332 waivers will be minimally impacted or would benefit from reduced burden by these policy changes. The Departments anticipate that implementing these provisions will not significantly change the associated burden currently approved under OMB control number: 0938–1389, Expiration date: February 29, 2024. The Departments are of the view that section 1332 waivers help increase State innovation, which in turn lead to more affordable health coverage for individuals and families in States that consider implementing a section 1332 waiver program.

The Departments sought comment on these impacts and assumptions but did not receive any comments in response to the cost and benefit estimates for this policy. We are finalizing these estimates as proposed.

2. Increase State Flexibility in the Use of Income and Resource Disregards for Non-MAGI Populations (42 CFR 435.601)

Current 42 CFR 435.601(d) authorizes States to apply less restrictive methodologies than those that would otherwise be required to be considered in the individual's eligibility determination. Paragraph (d)(4) requires that the application of less restrictive methodologies by State Medicaid agencies be comparable for all persons within each Medicaid eligibility group. For example, if a State wants to apply an income disregard to an eligibility group serving individuals who are 65 years old or older, it must either agree to apply the income disregard to all members of the eligibility group who are 65 years old or older or forego application of the disregard. We proposed to eliminate this requirement; however, as explained above, we are not finalizing the proposal at this time, and therefore, we are not finalizing the burden estimates included in the proposed rule.

3. Changes to the Basic Health Program Regulations (42 CFR 600.320)

Section 1331 of the ACA (42 U.S.C. 18051) requires the Secretary to establish a BHP, and section 1331(c)(4) specifically provides that a State shall coordinate the administration of, and provision of benefits under the BHP with other State programs. These finalized regulations build from previous BHP regulations to provide for options for BHP implementation and operations beginning with program year 2024.

In this final rule, we are finalizing the additional options for a State establishing a uniform method of determining the effective date of eligibility for enrollment in a standard health plan. We believe this finalized policy will provide additional flexibility for States when implementing their BHP. If the State chooses to follow either new effective date of eligibility for enrollment option, we believe this finalized policy will also benefit enrollees by providing coverage sooner than if the State were to follow the Exchange effective date of coverage option. We do not anticipate any costs to States because of this finalized policy, as we are only finalizing to provide other options by which a State could determine the effective date of eligibility for purposes of its BHP.

We sought comment on these impacts and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

4. HHS Risk Adjustment (45 CFR 153.320)

We are finalizing the recalibration of the HHS risk adjustment models for the 2025 benefit year using the 2019, 2020, and 2021 enrollee-level EDGE data. We believe that continuing to maintain the approach of blending (or averaging) 3 years of separately solved coefficients provides stability within the HHS-operated risk adjustment program and minimizes volatility in changes to risk scores from the 2024 benefit year to the 2025 benefit year. We also finalized continuing to apply a market pricing adjustment to the plan liability associated with Hepatitis C drugs in the HHS risk adjustment models.

We are finalizing the recalibration of the CSR adjustment factors for AI/AN zero-cost sharing and limited cost sharing CSR plan variant enrollees for the 2025 benefit year, and to retain the finalized AI/AN CSR adjustment factors for all future benefit years unless changed through notice-and-comment rulemaking. We also finalized maintaining the current CSR adjustment factors for silver plan variant enrollees (70 percent, 73 percent, 87 percent, and 94 percent AV plan variants) [346] for the 2025 benefit year and beyond, unless changed through notice-and-comment rulemaking. In addition, we affirm that for plan liability risk score calculations under the State payment transfer formula, we use the CSR adjustment factors that align with the AV of the plan. Thus, for unique State-specific plans that have higher plan liability than the standard silver plan variants (for example, CSR wrap-around and Medicaid-expansion plans), we will continue to apply the applicable CSR adjustment factor that corresponds to the plan's AV, as determined by HHS in consultation with the applicable State Departments of Insurance and other relevant State institutions.

We anticipate that changes to the AI/AN CSR adjustment factors will result in an increase in overall individual market risk pool HHS risk adjustment transfers under the State payment transfer formula in States with a sizable share of AI/AN enrollees. We anticipate that the finalized recalibration of the AI/AN CSR adjustment factors will increase transfer payments (or decrease transfer charges) to the issuers with the larger shares of the AI/AN subpopulation and increase transfer charges (or decrease transfer payments) under the State payment transfer formula for the issuers with smaller shares of the AI/AN subpopulation. Therefore, we anticipate that issuers with larger shares of AI/AN enrollees will have the ability to lower premium rates slightly, as the additional plan liability associated with AI/AN CSR recipients will be offset by the increase in HHS risk adjustment transfer payments (or decrease in transfer charges) to these issuers.

Based on internal analyses, the States with the highest proportion of AI/AN enrollees as a percentage of member months in the 2021 benefit year were Oklahoma (15 percent), Alaska (4 percent), Montana (2 percent), South

[345] Reinsurance collections ended in FY 2018 and outlays in subsequent years reflect remaining payments, refunds, and allowable activities.

[346] See 83 FR 16930 at 16953; 84 FR 17478 through 17479; 85 FR 29190; 86 FR 24181; 87 FR 27235 through 27236; and 88 FR 25772 through 25774.

Dakota (2 percent), and North Dakota (1 percent). Based on internal analyses of 2021 enrollee-level EDGE data, we anticipate that the finalized recalibration of the AI/AN CSR adjustment factors would increase total transfers under the State payment transfer formula by 8 percent in Oklahoma, 2.5 percent in Alaska, 2 percent in Montana, and less than 0.5 percent in South Dakota and North Dakota. We further anticipate that these transfer impacts would result in modest decreases in premiums among issuers that enroll a high proportion of AI/AN consumers, as issuers with larger AI/AN enrollment will benefit from increased transfer payments (or decreased transfer charges) under the State payment transfer formula. We do not anticipate that States with a low proportion of AI/AN enrollees would experience a transfer or premium impact due to the very low number of enrollees (less than 1 percent) who would be impacted by the finalized recalibration of CSR adjustment factors for this population in those States.

We sought comment on these impacts and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

5. HHS Risk Adjustment User Fee for 2025 Benefit Year (45 CFR 153.610(f))

For the 2025 benefit year, HHS will operate risk adjustment in every State and the District of Columbia. As described in the 2014 Payment Notice (78 FR 15416 through 15417), HHS' operation of risk adjustment under section 1343 of the ACA on behalf of States is funded through a risk adjustment user fee. For the 2025 benefit year, we finalized using the same methodology to estimate our administrative expenses to operate the HHS risk adjustment program as was used in the 2024 Payment Notice. As discussed previously in this final rule, risk adjustment user fee costs for the 2025 benefit year are expected to increase from the prior 2024 benefit year estimates. However, in the proposed rule, we project higher enrollment than our prior estimates in the individual and small group (including merged) markets in the 2024 and 2025 benefit years due to the enhanced PTC subsidies provided for in section 9661 of the ARP [347] and extended through the 2025 benefit year pursuant to section 12001 of the IRA.

We estimate that the total cost for HHS to operate the risk adjustment program on behalf of all States and the District of Columbia will increase from $60 million in 2024 to approximately $66 million in 2025. However, we believe that the increased enrollment projections will more than offset the increased risk adjustment user fee costs, and therefore, we proposed that the finalized risk adjustment user fee will be reduced from the $0.21 PMPM for the 2024 benefit year to $0.20 PMPM for the 2025 benefit year. In the proposed rule, we expected that the finalized risk adjustment user fee for the 2025 benefit year would reduce the amount transferred from issuers of risk adjustment covered plans to the Federal Government by approximately $3.5 million.

Since the proposed rule, we have further revised our enrollment projections used for the calculation of the risk adjustment user fee based on newly available data, and as result of that data, we are finalizing a lower 2025 benefit year risk adjustment user fee rate of $0.18 PMPM than proposed. This 2025 benefit year final user fee rate will further reduce the amount transferred from issuers of risk adjustment covered plans to the Federal Government by approximately $11 million.

We sought comment on these impacts and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

6. Audits and Compliance Reviews of Risk Adjustment Covered Plans (45 CFR 153.620(c))

We are finalizing amendments to § 153.620(c)(4) to require issuers of risk adjustment covered plans to complete, implement, and provide to HHS written documentation of any corrective action plans when required by HHS if a risk adjustment audit results in the inclusion of certain observations in the final audit report. Based on data from the 2018 benefit year high-cost risk pool audits, we estimate that each issuer audited may receive approximately 2 observations on average in future benefit years of high-cost risk pool audits where there is evidence of non-compliance with applicable Federal requirements, thereby triggering the finalized requirement for the issuer to take corrective action. We also estimate that it will take approximately 4 hours by a business operations specialist (at $73.12 per hour), 2 hours by a compliance officer (at $68.94 per hour), and 2 hours by a computer systems analyst (at $98.30 per hour) to complete, implement, and provide documentation to HHS of a corrective action plan for 2 observations. This results in a total cost per issuer of $626.96 (4 hours × $73.12 per hour + 2 hours × $68.94 per hour + 2 hours × $98.30 per hour). We estimate that we may conduct high-cost risk pool audits for approximately 40 issuers for each benefit year. Therefore, the total estimated cost to issuers of risk adjustment covered plans for each benefit year being audited will be approximately $25,078 (40 issuers × $626.96 per issuer).

We sought comment on these burden estimates and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

7. Approval of a State Exchange (45 CFR 155.105)

We are finalizing the addition of a requirement that a State seeking to transition to a State Exchange must first operate an SBE–FP, meeting all requirements under § 155.200(f), for at least one plan year, including its first open enrollment period.

We do not anticipate this finalized policy will create an additional burden to the States that are currently transitioning to a State Exchange, since those States have already operated an SBE–FP for at least 1 year or will first be operating an SBE–FP. Since PY 2020, all States that have transitioned to a State Exchange have first transitioned to an SBE–FP for one or more plan years. Furthermore, based on our experience, the costs for a State to transition from an FFE to operating an SBE–FP are relatively low in comparison to the costs a State will incur to transition from an FFE, or an SBE–FP, to establishing a State Exchange. This is due to the significant investment of costs incurred in implementing and operating a State Exchange consumer-facing website, eligibility and enrollment technology platform, and associated eligibility and enrollment support infrastructure, such as the State Exchange's consumer call center technology and resources, that FFEs and SBE–FPs rely on HHS to provide. We also expect the impact and costs to States that are considering, or may consider, establishing a State Exchange in the future to be minimal because we believe there will be sufficient time to plan for operating an SBE–FP before operating a State Exchange.

We believe that one of the primary benefits of States operating an SBE–FP prior to implementing and operating a State Exchange lies in the investment of time and resources that a State transitioning to, and operating, an SBE–FP makes in the establishment of direct

[347] Public Law 117–2.

relationships with their consumers, assisters, issuers, and other interested parties that will ultimately help in the successful implementation and operation of its State Exchange. Furthermore, we believe that the benefit of these activities to a State and its consumers and partners far outweigh the relatively low cost for the State to first transition to, and operate, an SBE–FP for at least one year before implementing and operating a State Exchange. We are also of the view that this policy will mitigate the significant risk and disruption, for consumers, assisters, issuers, and other interested parties, associated with a scenario where a State wishes to transition from an FFE to establishing and operating a State Exchange in a timeframe of less than a year or otherwise not in alignment with the timelines associated with the approval of a State Exchange specified in § 155.106.

We sought comment on these assumptions of the financial impact of this proposal on States that transition to an SBE–FP for at least one plan year before operating a State Exchange pursuant to this proposal.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

8. Election To Operate an Exchange After 2014 (45 CFR 155.106)

As discussed in the preamble, we are finalizing that a State, as part of its activities for its establishment of a State Exchange, provide upon request, supplemental documentation to HHS detailing the State's implementation of its State Exchange functionality, including information regarding the State's ability to implement and comply with Federal requirements for operating an Exchange. Such supporting documentation would inform HHS's decision to approve or conditionally approve a State Exchange and could include, for example, materials demonstrating progress toward meeting State Exchange Blueprint application requirements, documentation that details a State's plans to implement and meet the Exchange functional requirements as laid out in the State Exchange Blueprint application, or plans to engage in consumer assistance programs and activities.

We do not anticipate additional burden associated with this policy. The current State Exchange Blueprint application already includes requests for supporting documentation that a State is progressing toward meeting State Exchange Blueprint application requirements. As a result, this provision codifies existing policy, which States currently comply with. Blueprint application. The information collection burden associated with this policy is already accounted for under approved OMB control number: 0938–1172, Expiration date: August 31, 2025.

Further, as discussed in the preamble, we are finalizing the requirement that when a State submits its State Exchange Blueprint application to HHS for approval, the State must provide the public with notice and a copy of its State Exchange Blueprint application. We are also finalizing the requirement that at some point following a State's submission of its State Exchange Blueprint application to HHS, a State must conduct at least one public engagement (such as a townhall meeting or public hearing), in a timeline and manner considered effective by the State, with concurrence from HHS, at which interested parties can learn about the State's intent to transition to a State Exchange and the State's progress toward effectuating that transition. We are also finalizing the requirement that while a State is making this transition and until HHS has approved or conditionally approved the State Exchange Blueprint application, a State conducts periodic public engagements at which interested parties can continue to learn about the State's progress toward finalizing its transition to a State Exchange, in a timeline and manner, either in-person or virtually, considered effective by the State.

We do not anticipate significant additional burden associated with these requirements, as States are currently required to submit a State Exchange Blueprint application to HHS for approval, and so the impact of sharing a copy of the submitted Exchange Blueprint application with the public using their website would be *de minimis.* Further, we believe that since States seeking to establish, or are in the process of establishing, a State Exchange for PY 2025 or in subsequent years would be given broad flexibility to design the public engagements in a manner that best suits their respective State, for meeting the interested party consultation requirement under § 155.130, that States will design their public engagements in a manner such that the additional burden incurred by the State would be minimal. The goal of the policy changes at § 155.106(a)(2)(ii) is to clearly state, for States that are seeking to establish State Exchanges, HHS' expectations of the State engaging with the public regarding its transition to a State Exchange, thus strengthening the transparency requirements of the State Exchange Blueprint review and approval process. We believe this policy will help States that establish a State Exchange meet the consultation requirements of interested parties at § 155.130 during the period when the State is establishing a State Exchange, by formalizing a process whereby States and interested parties communicate about the State's establishment of a State Exchange throughout the transition process. As such, we believe the impact of this policy will be *de minimis.*

We sought comment on this burden estimate and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

9. Additional Required Benefits (45 CFR 155.170)

We are finalizing amendments to § 155.170(a)(2) to provide that benefits covered in a State's EHB-benchmark plan will not be considered in addition to EHB and thus will not be subject to defrayal by the State beginning with PY 2025. We believe that this revision will have a mixed effect on the cost to the Federal Government. In States that update EHB-benchmark plans to include benefits, the costs of which are currently being defrayed, the percentage of premium attributable to coverage of EHB for purpose of calculating APTC will increase and any increase remains subject to the typicality requirement in that section. In a State that enacts a mandate for a benefit that is currently covered in its EHB-benchmark plan, there will be no effect on Federal Government expense as the benefit was already included in the percentage of premium attributable to coverage of EHB for purpose of calculating APTC. States may choose to evaluate the overlap between mandates and EHB-benchmark-plans for benefits they are currently defraying the costs of but are not required to. Issuers may have to make modifications to their plan designs and plan filings to reflect any possible changes in designation of benefits as EHB because of this policy in the regular course of updating those annual materials. We do not anticipate an additional burden on States or issuers associated with this finalized policy.

We sought comment on this burden estimate and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

10. Consumer Assistance Tools and Programs of an Exchange (45 CFR 155.205)

As discussed in the preamble, we are finalizing the addition of minimum standards for Exchange call center operations, such that Exchanges, other than SBE–FPs and SHOP Exchanges that do not provide for enrollment in SHOP coverage through an online SHOP enrollment platform, meet the following additional requirements: their call center must provide consumers with access to a live call center representative during the Exchanges' published hours of operation and their live call center representatives must be able to assist consumers with submitting their Exchange application for QHP coverage.

We believe this policy will support the intent of sections 1311(d)(4)(B) and 1413(b)(1)(A)(ii) of the ACA by codifying the requirement that a consumer must be able to obtain live call center support with submitting an application for QHP coverage during reliable, published hours of operation. It is our presumption that speaking to a live representative will better aid in troubleshooting consumer Exchange application issues, provide a real time opportunity for a live representative to explain Exchange application terminology to a consumer, provide for a live representative to ensure the consumer provides the most correct information to the Exchange application (thereby alleviating unnecessary follow-up), and provide greater overall consumer satisfaction.

As stated in the preamble, we believe that all State Exchanges already meet these finalized minimum standards, and we know that the Exchanges on the Federal platform does as well. As such, we do not anticipate an additional burden associated with this finalized policy.

We sought comment on these impacts and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

11. Requirement for Centralized Exchange Eligibility and Enrollment Platform on the Exchange's Website (45 CFR 155.205(b) and 155.302(a)(1))

We are finalizing amendments to § 155.205(b)(4) to require that an Exchange operate a centralized eligibility and enrollment platform on the Exchange's website (or, for an SBE–FP, through the Federal eligibility and enrollment platform) such that the Exchange allows for the submission of the single, streamlined application for enrollment in a QHP and insurance affordability programs by consumers, in accordance with § 155.405, through the Exchange's website and performs eligibility determinations for all consumers based on submissions of the single, streamlined application. Further, we are finalizing amendments to § 155.302(a)(1) to clarify that the Exchange, through the centralized eligibility and enrollment platform operated on the Exchange's website (or, for an SBE–FP, the Federal eligibility and enrollment platform) is the entity responsible for making all determinations regarding the eligibility for QHP coverage and insurance affordability programs regardless of whether an individual files an application for enrollment in a QHP on the Exchange's website, or on a website operated by an entity described under § 155.220, such as a web-broker defined at § 155.20, or a direct enrollment entity or QHP issuer described under § 155.221. This amendment to § 155.302(a)(1) will also clarify that only entities that an Exchange elects to contract with to operate its centralized eligibility and enrollment platform can perform this function on behalf of an Exchange and would prohibit Exchanges from solely relying on non-Exchange entities, including a web-broker (defined at § 155.20) or other entities under § 155.220 or § 155.221, from making such eligibility determinations on behalf of an Exchange.

We also are finalizing amendments to § 155.205(b)(5) to require that an Exchange operate a centralized eligibility and enrollment platform through the Exchange's website (or, for an SBE–FP, by relying on the Federal eligibility and enrollment platform) so that the Exchange (or, for an SBE–FP, the Federal eligibility and enrollment platform) meets the requirement under § 155.400(c) to maintain records of all effectuated enrollments in QHPs, including changes in effectuated QHP enrollments.

Since all Exchanges, including State Exchanges, SBE–FPs, and FFEs, currently provide access to a centralized eligibility and enrollment platform and process for consumers that they serve, and all Exchanges also currently perform all eligibility determinations through the operation of a centralized eligibility and enrollment platform on their websites, we believe the burden of this policy on Exchanges and interested parties will be minimal.

We sought comment on the assumptions and estimated impacts of this proposal.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

12. Adding and Amending Language To Ensure Web-Brokers Operating in State Exchanges Meet Certain HHS Standards Applicable in the FFEs and SBE–FPs (45 CFR 155.220)

We are finalizing amendments to § 155.220 to apply to web-brokers operating in State Exchanges, and consequently in State Exchanges, in both the Individual Market Exchanges and SHOPs, certain existing HHS standards governing use of web-brokers' non-Exchange websites to assist consumers with enrolling in QHPs and applying for APTC/CSRs in a manner that constitutes enrollment through an Exchange. As discussed in the preamble of this final rule, the finalized regulatory amendments will require these State Exchanges to draft policy, update standards, and potentially hire more staff to perform functions not currently being performed by the State Exchange as a result of applying the identified § 155.220 standards to web-brokers participating in State Exchanges. These changes will also require web-brokers hosting non-Exchange websites in these State Exchanges to perform web-development and oversight to ensure compliance with the HHS minimum standards this rulemaking finalized to extend to these web-brokers. These changes will also require web-brokers in State Exchanges who want to assist consumers with enrolling in QHPs and applying for ATPC and CSRs to display standardized disclaimers, display QHP comparative information, display information pertaining to a consumer's eligibility for APTC or CSRs, to participate in operational readiness reviews and potentially maintain relevant documentation, and to extend downstream agent and broker requirements to web-brokers operating in State Exchanges. Although these policies allow States certain flexibility for State Exchanges to tailor their web-broker program (including the flexibility to add State-specific language to standardized disclaimers, provided the additional language does not conflict with the HHS-provided standardized disclaimers) and establish their own standards with respect to operational readiness demonstrations by their web-brokers, we expect the impact and costs to be reasonably-based on the impacts seen on the FFEs and SBE–FPs.

Although there will be some additional burden for web-brokers operating in State Exchanges, amounting to approximately $43,019

per web-broker as discussed in the information collection requirements section of this final rule, we anticipate that some of these State Exchanges may utilize web-broker entities already participating in the FFEs and SBE–FPs, which will help provide administrative savings related to the approval process if the State Exchange does not impose additional State-specific requirements beyond the HHS minimum standards. We encourage State Exchanges to leverage web-broker operational readiness demonstrated for the FFEs and SBE–FPs when possible. Additionally, we expect those web-brokers already participating in the FFEs and SBE–FPs to be able to leverage their existing web-development work with additional burden and costs only required for tailoring the website display, operational readiness, and downstream agent and broker access to any State-specific requirements adopted by the applicable State Exchange. Additionally, as described in the accompanying ICR discussion, we anticipate an impact on State governments totaling $2,346,128 for 5 States to opt to host a web-broker program for their State Exchange.

We estimate a total cumulative burden of $860,380 associated with this policy for an estimated 20 web-brokers operating across the 5 State Exchanges. We anticipate these changes to extend certain HHS minimum standards governing web-broker participation in FFEs and SBE–FPs to also apply to State Exchanges and their web-brokers will be beneficial to consumers by establishing uniform, baseline requirements for agent, broker, and web-broker participation across all Exchange types. These finalized changes will allow State Exchanges to leverage the framework that has already been established and currently applies to FFEs and SBE–FPs, thereby decreasing the burden to these State Exchanges to establish such a program, while providing some flexibility for these State Exchanges to tailor the new requirements to include State-specific content (such as the updating disclaimer language to refer to the State Exchange website rather than the *HealthCare.gov* website). Additionally, these finalized changes will establish administrative and operational consistency throughout the Exchanges, which is beneficial to agents, brokers, and web-brokers by allowing them to expand their business into States with State Exchanges in a more streamlined fashion, as well as to Exchanges and their consumers.

We sought comment on these estimated impacts and assumptions.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates with the modifications to the estimated burden hours for web-brokers to implement the requirements associated with this proposal. We summarize and respond to public comments received regarding this provision below.

Comment: One commenter noted that the burden estimates provided are overstated and fail to incorporate the potential cost savings and additional user fee revenues that States could realize through utilization of web-brokers, including reduced burdens on State call centers and State Exchanges.

Response: We acknowledge this comment and have modified the burden estimates incorporated within this regulatory impact analysis. Refer to the comment summary within this finalized proposal's ICR analysis for a detailed summary and response to this comment.

13. Ability of States To Permit Agents and Brokers and Web-Brokers To Assist Qualified Individuals, Qualified Employers, or Qualified Employees Enrolling in QHPs (45 CFR 155.220(h))

As discussed in the preamble to this final rule, we are finalizing revisions to § 155.220(h) to specify that the CMS Administrator, a principal officer, will review agent, broker, and web-broker requests for reconsideration of HHS' decision to terminate their Exchange agreement(s) for cause. We are finalizing that the CMS Administrator's determination would be final and binding. We believe this policy will improve transparency for agents, brokers, and web-brokers by ensuring they know who will be responsible for handling these reconsideration decisions under § 155.220(h).

We sought comment on the estimates associated with this proposal.

We received only positive comments on this proposal, with commenters stating this would improve transparency and clarity in the regulation. We are finalizing these estimates as proposed.

14. Establishing Requirements for DE Entities Mandating *HealthCare.gov* Changes Be Reflected on DE Entity Non-Exchange Websites Within a Notice Period Set by HHS (45 CFR 155.221(b))

We are finalizing amendments to § 155.221 as proposed but with technical changes to require that DE entity non-Exchange websites assisting consumers in FFEs and SBE–FPs implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. We are also finalizing the requirement that State Exchanges must implement a similar process to require their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made by State Exchanges to the State Exchanges' websites by meeting standards communicated and defined by the State Exchanges within a time period set by the State Exchange, unless the State Exchange approves a deviation from those standards under the deviation request process it is required to establish should the State Exchange elect to permit deviation requests.

As discussed in the preamble of this final rule, this policy will require web-brokers and QHP issuers participating in DE in FFE and SBE–FP States to update their non-Exchange websites to implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS. This requirement will provide those DE entities flexibility in their user interface graphic design, provided that their design complies with the standards defined by HHS. This requirement will also allow those DE entities to submit a deviation request for review and approval by HHS if they would like to implement a display that does not meet those standards. We anticipate an average of three or fewer required display changes annually, with the majority of changes being simpler website display changes that are relatively easy to implement. Furthermore, HHS will provide examples and associated disclaimer text with the release of any required website display changes pursuant to this finalized policy, and therefore, we expect the overall impact of these simple website display changes to be minimal. As described in the information collection requirements section of this final rule, we estimate a total cumulative annual burden of $240,120 associated with the requirement for DE entity non-Exchange websites assisting consumers in FFEs and SBE–FPs to implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* and a burden of $5,171 associated with completing and submitting a request to deviate from the *HealthCare.gov* display.

As discussed in the preamble for this final rule, we continue to support DE entities' use of innovative decision-support tools and user interface designs, and this policy is not intended to prohibit the implementation of display features beyond the baseline provided by *Exchange websites.* As such, there may be occasions where some web-brokers and QHP issuers participating in direct enrollment may have implemented the standards of the desired display before the change was made on *the Exchange website.* In these instances where the DE entity non-Exchange website is already meeting the minimum standards associated with the website display changes communicated by HHS pursuant to this requirement, the entity will not have to make any further website updates. We also anticipate approximately one more complex display change per plan year, potentially involving updates to backend UI algorithms and display methodologies. Although more complex display changes may represent additional burden for DE entities, we will ease the burden by providing them with examples of *the Exchange website's* display, technical implementation guidance (including Marketplace API (MAPI) or Public Use Files (PUF) data integration guidance), and technical assistance as needed. We anticipate that giving examples of a user interface design that meets HHS' standards will ease the burden of implementation as compared to solely providing HHS' standards and relying on DE entities to determine how to configure their websites to meet those standards.

Finalized § 155.221(j) will extend this new finalized DE entity non-Exchange website display requirement to require State Exchanges to require their DE entities to implement and prominently display website changes in a manner that is consistent with display changes made by State Exchanges to the State Exchanges' websites on their non-Exchange websites for purposes of assisting consumers with DE in QHPs offered through the Exchange in a manner that constitutes enrollment through the Exchange. This will require State Exchanges to establish requirements for DE entities operating in State Exchanges to reflect changes to the State Exchange website on their DE entity non-Exchange websites. This change will also require State Exchanges to establish processes for communicating and defining standards and for setting advance notice periods. We also encourage State Exchanges to consider the same factors (that is, complexity of the change and the urgency with which the change must be implemented on the DE entity's non-Exchange website) when setting advance notice periods. Similarly, we encourage State Exchanges to provide DE entities operating in their States examples of the State Exchange display, and technical assistance, including technical implementation guidance, to ease the burden of required display changes.

We anticipate this requirement will benefit consumers by codifying and expanding our existing EDE HHS-initiated change request practices to apply to all DE entities and ensuring that all Exchange consumers receive consistent, clear, and accurate information in a timely fashion as they navigate the QHP selection and enrollment process. We are further of the view that this requirement will mitigate the risk that consumers receive different, and possibly confusing or misleading, information based on the platform they choose to utilize when enrolling in or applying for coverage. This requirement will help ensure consumers using the DE pathways benefit from policies we introduce to improve the *HealthCare.gov* website display, and in State Exchanges the State Exchange website, by enhancing the consumer experience, increasing consumer understanding, and simplifying the plan selection process.

As discussed in the ICR for this requirement, the cumulative cost estimate as a result of the new finalized paragraph § 155.221(j)(3) will be approximately $247,359 for 20 entities operating in the State Exchanges in the 2025 benefit year. This includes the estimated costs for entities that submit a request to deviate from the display approach adopted by the State Exchange website, should the State Exchange elect to permit deviation requests, which is estimated at a cost of approximately $7,239 annually.

We sought comment on these estimated impacts.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

15. Ensuring DE Entities Operating in State Exchanges Meet Certain Standards Applicable in the FFEs and SBE–FPs (45 CFR 155.221)

We are finalizing amendments to § 155.221 to apply to DE entities operating in State Exchanges, and consequently State Exchanges that utilize DE entities, certain existing HHS standards applicable to DE entities assisting consumers with enrolling in QHPs and applying for APTC/CSRs in FFEs and SBE–FPs, in both the Individual Market Exchanges and SHOPs.

As discussed earlier in this final rule, regulatory amendments will require these State Exchanges to draft policy, update standards, and potentially hire additional staff to perform functions not currently being performed by the State Exchange because of applying certain § 155.221 standards to the State. The amendments will also require DE entities participating in DE programs in State Exchanges to perform web-development to ensure compliance with the Federal minimum standards that this rulemaking finalized to extend to these DE entities, along with any State-specific requirements that may be adopted under the flexibility provided to State Exchanges in this rulemaking.

Although there will be additional burden for DE entities operating in State Exchanges, amounting to approximately $100,716 per DE entity, as discussed in the information collection requirements section of this final rule, we anticipate that some of these State Exchanges may utilize DE entities already participating in the FFEs and SBE–FPs, which will help provide administrative savings related to the approval process under § 155.221(b)(4) if the State does not impose additional State-specific requirements beyond the HHS standards. We encourage State Exchanges to leverage DE operational readiness demonstrated for the FFEs and SBE–FPs when possible. Additionally, we expect those DE entities already participating in the FFEs and SBE–FPs to be able to leverage their existing web-development work with additional burden only required for tailoring the website display to any State-specific requirements adopted by the State Exchange (for example, updating website disclaimers to reference the State Exchange website rather than the *HealthCare.gov* website). Although these amendments allow States certain flexibility for State Exchanges to tailor their DE program and establish their own standards with respect to operational readiness demonstrations by their DE entities, including whether to require third-party audits of DE entities and to impose additional requirements beyond the proposed HHS minimum standards as they determine may be appropriate based on their operational or business needs, we expect the impact and costs to be reasonably based on the impacts seen on the FFEs and SBE–FPs. As described in the information collection requirements section, we anticipate a total cumulative burden of $1,233,262

for DE entities in State Exchanges to comply with this policy to ensure DE entities operating in these State Exchanges are meeting certain requirements applicable in the FFEs and SBE–FPs. Additionally, we anticipate this policy will have an impact on State governments totaling $3,353,468 for 5 States to opt to host a DE program for their State Exchange.

We anticipate that these finalized changes to extend certain minimum HHS standards governing DE entity participation in FFEs and SBE–FPs to also apply to State Exchanges will benefit consumers by establishing uniform, baseline requirements for DE entity participation across all Exchange types. These finalized changes will allow State Exchanges to leverage the framework that has already been established and currently applies to FFEs and SBE–FPs, thereby decreasing the burden to these State Exchanges to establish such a program, while providing some flexibility for these State Exchanges to tailor the applicable standards to include State-specific content. Additionally, this policy will establish administrative and operational consistency throughout the Exchanges, which benefits DE entities by allowing them to expand their business into States with State Exchanges with minimal costs and burdens. Consumers will also benefit by the expansion of entities and enrollment pathways available to assist with enrolling in health insurance coverage.

We sought comment on these estimated impacts and assumptions.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates with modifications to the burden hours and number of entities subject to these information collection requirements. We summarize and respond to public comments received regarding this provision below.

Comment: A few commenters noted that the burden estimates provided are overstated and fail to incorporate the potential cost savings and additional user fee revenues that States could realize through utilization of DE entities, including reduced burdens on State call centers and State Exchanges.

Response: We acknowledge these comments and have modified the burden estimates incorporated within this regulatory impact analysis. Refer to the comment summary within this finalized proposal's ICR analysis for a detailed summary and responses to these comments.

16. Failure To Reconcile (FTR) Process (45 CFR 155.305(f)(4))

We are finalizing in connection with the FTR process described in § 155.305(f)(4) that Exchanges will be required to send notices to tax filers for the first year in which they failed to reconcile APTC as an initial warning to inform and educate tax filers that they need to file and reconcile, or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive year. If the Exchange cannot send the notice directly to the tax filer, or otherwise cannot send protected FTI, it may send a more general notice to an enrollee or their tax filer informing them of the APTC reconciliation requirement, along with other possible reasons they may be at risk of losing APTC eligibility.

Under this policy, Exchanges on the Federal platform will continue to send notices to tax filers for the year in which they have failed to reconcile APTC as an initial warning to inform and educate tax filers that they need to file and reconcile, or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive tax year. Our policy to codify this practice and require it of all Exchanges, including State Exchanges, to ensure that tax filers who have been determined to have FTR status for 1 year are adequately educated on the file and reconcile requirement, and have ample opportunity to address the issue and file and reconcile their APTC before they are determined to have FTR status for 2 consecutive years. We requested comment on how best to conduct outreach to tax filers who need more intensive assistance in understanding FTR status, including directing them to resources such as Navigator or Assisters that could help explain what they need to do to reconcile their APTC.

This policy will support compliance with the filing and reconciling requirement under 36B(f) of the Code and its implementing regulations at 26 CFR 1.36B–4(a)(1)(i) and (a)(1)(ii)(A), minimize the potential for APTC recipients to incur large tax liabilities over time, and support eligible enrollees' continuous enrollment in Exchange coverage with APTC by avoiding situations where enrollees become uninsured when their APTC is terminated. Additionally, this policy will better align State Exchanges' failure to reconcile processes with that of the Exchanges on the Federal platform.

We are aware of seven States that will operate their own State Exchange for PY 2025 and have not yet fully implemented the infrastructure to run FTR operations for plan years through 2024 due to the flexibility the Exchanges were given to temporarily pause FTR operations due to the COVID–19 PHE.

We sought comment on the estimated one-time costs for these States to fully implement the functionality and infrastructure to conduct FTR operations, and the estimated annual costs to maintain FTR operations.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

17. Verification Process Related to Eligibility for Enrollment in a QHP Through the Exchange (45 CFR 155.315(e))

Finalizing revisions to § 155.315(e) so that Exchanges can accept incarceration attestations without further verification and verify incarceration status using an HHS-approved data source only if they choose to will minimize administrative costs and burdens for Exchanges. Flexibility in verifying incarceration status for Exchanges will result in significant cost savings through not creating and processing incarceration DMIs. The current incarceration verification process resulted in a high number of DMIs, almost all of which are resolved in favor of the applicant and has been burdensome and costly for the Exchanges to implement. By revising the current incarceration verification process, this policy will also eliminate undue burdens and barriers to care for applicants, particularly formerly incarcerated people, a population comprised of a significant number of people with disabilities.[348] Many documents that can prove incarceration status cannot be obtained without an unexpired proof of identity document, and most cannot be obtained without submitting non-refundable payments. Incarceration may inhibit one's financial savings, and formerly incarcerated individuals are less likely to secure employment.[349] As discussed further in the information collection requirements section for this policy, we anticipate a one-time cost to 11 State Exchanges of approximately $23,770 to conduct analyses to determine whether to accept consumer attestation of incarceration status or use an alternative data source to verify incarceration status and to submit such request to HHS, and make associated changes to their eligibility

[348] Robert Apel, Gary Sweeten, The Impact of Incarceration on Employment during the Transition to Adulthood, Social Problems, Volume 57, Issue 3, 1 August 2010, Pages 448–479, *https://doi.org/10.1525/sp.2010.57.3.448*.

[349] Id.

systems and processes to implement the option they choose.

From PY 2018 to 2019, there were 110,802 incarceration DMIs generated. In PY 2019, nearly 38,000 out of 78,000 applicants submitted documents to attempt to resolve the incarceration DMI. Conducting an intensive incarceration verification check through the DMI process for each DMI caused HHS to incur additional costs totaling about $0.57 million per year for verification of incarceration along with the PUPS annual maintenance and transaction fees. The additional costs associated with generating incarceration DMIs include the costs to inform applicants of their DMI through their eligibility determination notice, and to process the DMI and any documentation mailed by the applicants. State Exchanges have likely incurred similar costs. Of the 13 State Exchanges (operating in 12 States and the District of Columbia) with incarceration verification processes, eight conduct incarceration verifications similar to those conducted by the Exchanges on the Federal platform. We estimate that incarceration DMI processing costs approximately $9,561,000 annually across all eight of these State Exchanges. Of the 13 State Exchanges with incarceration verification processes, five State Exchanges connected to an individual State or local incarceration facility for verifications and fully process incarceration DMIs. These State Exchanges currently incur DMI processing costs, including costs associated with noticing the applicant of their DMIs and costs associated with DMI and appeals casework. Based on costs incurred by the Exchanges on the Federal platform to process DMIs, we estimate that incarceration DMI processing costs State Exchanges approximately $7,171,000 annually across all 5 of these State Exchanges. Finally, 3 States are transitioning to State Exchanges. We anticipate their incarceration verification operations will cost approximately $3,585,000 annually. In total, the costs to an anticipated 16 State Exchanges would be approximately $20,317,000 annually if current policy continued.

By providing flexibility to Exchanges to verify incarceration status and allowing Exchanges to accept applicant attestations without verification, this policy will enable HHS and Exchanges to avoid incurring the aforementioned costs associated with DMI creation and processing. Exchanges will not have to invest resources into building data transfer connections with an alternative incarceration verification data source and will not have to invest in providing DMI notices and support to applicants. Therefore, the cost savings to State Exchanges associated with this policy will be approximately $20,317,000.

As previously mentioned, conducting an intensive incarceration verification check through the DMI process for each DMI caused HHS to incur additional costs totaling approximately $570,000 per year for verification of incarceration along with the PUPS annual maintenance and transaction fees. While overall, this policy will reduce the burden and costs associated with incarceration verification operations and data sourcing, there will be a modest up-front cost of $1,200,000 to HHS to modify the Federal platform's current incarceration verification processes for the purposes of verifying eligibility for QHP, and it will cost $340,000 to update the Federal platform's system logic for HHS to stop sending incarceration verification requests to PUPS. Once these operations and noticing have stopped, no further costs will be incurred by HHS, or by Exchanges that opt to act on the flexibilities provided by this policy. In total, we anticipate a cost of $1,540,000 to HHS because of this change. We reiterate that this cost will be overshadowed by the expected savings of approximately $20,317,000 because of this policy.

We sought comment on these estimates.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

18. Verification Process Related to Eligibility for Insurance Affordability Programs (45 CFR 155.320)

We are finalizing amendments to § 155.320(c) by adding a new requirement at paragraph (c)(1)(iii) to require that State Exchanges pay for their utilization of the CSI data provided by the VCI Hub service to verify a tax household's attested annual income, or a Medicaid applicant's current household income, due to our reinterpretation of State Exchange and State Medicaid and CHIP agency use of the Hub to access and use the income data provided by the optional VCI Hub service as a State Exchange or a State Medicaid and CHIP agency function. We are finalizing that beginning on July 1, 2024, State Exchanges and State Medicaid and CHIP agencies will be required to pay for the costs of their use of the VCI Hub Service. We are also finalizing the proposal with a modification: rather than requiring States to pay in advance for their use of the VCI Hub Service, HHS will invoice States on a monthly basis for their actual utilization of the CSI income data accessed through VCI Hub service, as well as an administrative fee to account for any direct or indirect costs of making CSI income data accessed through VCI Hub service available to State Exchanges and State Medicaid and CHIP agencies.[350] In accordance with the modified policy being finalized in this rulemaking, we updated our proposed cost estimates between the proposed and final rules. We now estimate that the costs to HHS to build the structure and set up operations for the purposes of distinguishing costs of accessing CSI data through the VCI Hub service between the State Exchange and State Medicaid and CHIP agencies will be $2,557,077 in 2024. We also estimate that the cost to States associated with the administrative fee to account for any direct or indirect costs to HHS of making CSI income data accessed through the VCI Hub service available to Exchanges and State Medicaid and CHIP agencies will be $867,539 in 2024, and $1.7 million annually beginning in 2025.

Because the price per transaction for CSI data is proprietary information, we are unable to provide those numbers in this rulemaking, or the precise utilization rates for State Exchanges and State Medicaid and CHIP agencies as this would be a direct conflict with the contract that HHS holds with the CSI contractor. However, based on HHS' own analysis, in fiscal year (FY) 2022, State Exchange utilization of the VCI Hub service led to costs of approximately $26 million dollars. Similarly, in FY 2022, State Medicaid and CHIP agency utilization of the VCI Hub service resulted in costs of approximately $77 million dollars. We also estimate that by having State Medicaid and CHIP agencies pay for 25 percent of their transaction costs, the Federal Government can save between $32 to $55 million per year. By having State Exchanges pay for 100 percent of their transaction costs, we estimate savings to the Federal Government could be between $39 and $67 million per year; this cost estimate includes an assumption of one to two States transitioning to State Exchanges in future years. Assuming one to two new States transition to a State Exchange in the next 4 years, we applied a 5 percent increase to estimate the additional pings from these additional States. We

[350] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.* See also Circular No. A–97. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-097.pdf.*

estimate that taken together, this finalized policy will result in a transfer of between $72 to $122 million per year of costs from the Federal Government to States beginning in 2024.

We are aware that six State Exchanges currently only have one connection for both their State Exchange and State Medicaid and CHIP agency, which may pose a challenge when determining which VCI Hub transactions are attributable to the State Exchange, and which are attributed to the State Medicaid and CHIP agency. We anticipate that one to three State Exchanges may elect to build a separate connection in order to accurately account for which VCI Hub transactions originate from their State Exchange and their State Medicaid and CHIP agency and we estimate about $1 to 3 million in one-time costs in 2024 to build the IT infrastructure for a second Hub connection, totaling about $3 to 6 million in one-time costs for the one to three States that choose to make any changes with how they currently access the VCI Hub service. States that do not elect to build a separate connection would instead need to develop a cost allocation methodology to track VCI Hub transaction volume from their State Exchange and State Medicaid and CHIP agency and communicate this to HHS so that HHS can invoice accurately and appropriately.

We sought comment on these estimates.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed with the following modification that rather than requiring States to pay in advance for their use of the VCI Hub Service, HHS will invoice States on a monthly basis for their actual utilization of the CSI income data accessed through the VCI Hub Service, as well as an administrative fee to account for any direct or indirect costs of making CSI income data accessed through the VCI Hub service available to Exchanges and State Medicaid and CHIP agencies, in accordance with the Intergovernmental Cooperation Act and interpretive OMB Circulars A–97 and A–25.[351]

19. Eligibility Redetermination During a Benefit Year (45 CFR 155.330(d))

We are finalizing revisions to § 155.330(d) to require Exchanges to conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage beginning with the 2025 calendar year. Additionally, we are finalizing amendments to § 155.330(d)(3) to grant the Secretary the authority to temporarily suspend the PDM requirement during certain situations or circumstances that lead to the limited availability data needed to conduct PDM or of documentation needed for an enrollee to notify the Exchange that the result of PDM is inaccurate, as described in § 155.330(e)(2)(i)(C).

Currently, § 155.330(d)(3) defines ''periodically'' only for PDM activities that identify enrollment in Medicare, Medicaid, CHIP, and BHP, meaning that Exchanges must conduct Medicare PDM, Medicaid or CHIP PDM, and BHP PDM twice a year. The current regulation does not specify the frequency by which PDM activities to identify deceased enrollees must occur. The 2019 Program Integrity Rule did not require Exchanges to perform PDM for death at least twice in a calendar year so that Exchanges could prioritize the implementation of the new requirement to conduct PDM for Medicare, Medicaid, CHIP and, if applicable, BHP eligibility or enrollment at least twice yearly. Periodic checks for deceased enrollees are a critical aspect to ensuring Exchange program integrity.

We are finalizing revisions to § 155.330(d) to require Exchanges to conduct periodic checks for deceased enrollees twice yearly and subsequently end deceased enrollees' QHP coverage beginning with the 2025 calendar year. This policy will not only align with current policy and operations on the Exchanges on the Federal platform but will also prevent overpayment of QHP premiums and accurately capture household QHP eligibility based on household size.

Based on internal data, we anticipate that it will cost the Federal Government approximately $58,923 to conduct an additional check for deceased enrollees per year. In 2023, we conducted two rounds of Death PDM where the average number of expired households was 7,151; the average APTC amount per household was $549 per month; and, at the time of the expiration activities, there was an average of 6.5 months left in the plan year. We calculate the APTC savings to be approximately $25 million. Prior to implementing Death PDM in 2019, we looked at the number of consumers that were removed from coverage by the surviving family without the aid of Death PDM and close to 50 percent of the deceased consumers were removed from coverage. Thus, we estimate the net amount of APTC saved is estimated will be approximately $12.5 million per year beginning in 2025.

State Exchanges that are not already conducting Death PDM with the finalized required frequency, or deemed in compliance with PDM requirements, will be required to engage in IT system development activity to communicate with these programs and act on enrollment data either in a new way, or in the same way more frequently if this proposal is finalized. Thus, there may be additional associated administrative cost for these State Exchanges to implement the PDM requirement. As discussed in the information collection requirements section of this final rule, for a State Exchange not already conducting Death PDM at least twice a year, we estimate that it will cost approximately $3,932 per State Exchange (a total of $43,252 for all 11 State Exchanges currently not meeting the finalized requirement) to implement this finalized provision through their system. We assume that this cost will be incurred primarily in 2025 by State Exchanges. These costs will be incurred by the State Exchanges as they are required to be financially self-sustaining and do not receive Federal funding for their establishment or operations.

We sought comments in response to the burden estimates for this policy.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing as proposed.

20. Incorporation of Catastrophic Coverage Into the Auto Re-Enrollment Hierarchy (45 CFR 155.335(j))

We are finalizing the policy to incorporate catastrophic coverage as defined in section 1302(e) of the ACA into the auto re-enrollment hierarchy at § 155.335(j) as proposed, except that we are amending the language at § 155.335(j)(1)(v) and (j)(2)(iv) to incorporate the phrase, ''to the extent permitted by applicable State law.'' As further discussed in preamble for this policy, this language is to reflect that, as with existing re-enrollment hierarchy rules, Exchanges must take into account applicable State law when implementing auto re-enrollment. We are also finalizing the addition of § 155.335(j)(5) to establish that an Exchange may not newly auto re-enroll an enrollee into catastrophic coverage who is currently enrolled in coverage of a metal level as defined in section 1302(d) of the ACA. Because this policy is being finalized, we will also update the FFE Enrollment Manual to incorporate catastrophic coverage into the re-enrollment hierarchy for alternate enrollments.

[351] See Circular No. A–25 Revised. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-025.pdf.* See also Circular No. A–97. *https://www.whitehouse.gov/wp-content/uploads/2017/11/Circular-097.pdf.*

We sought comment on the proposal's impacts, including whether it would result in an increase in costs and burden for issuers and Exchanges. In the proposed rule, we stated that burden for Exchanges on the Federal platform and issuers participating in those Exchanges would be mitigated because we already encourage issuers to submit crosswalk options for catastrophic enrollees, including those who will lose eligibility for catastrophic coverage. We also sought comment on our belief that this change would make it more likely that catastrophic coverage enrollees would be auto re-enrolled.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the policy to incorporate catastrophic coverage into the auto re-enrollment hierarchy below.

Comment: Some commenters stated that some State Exchanges already incorporate catastrophic coverage enrollees into their re-enrollment processes, and some comments that cited State Exchanges that do not do so. Other commenters stated that the policy could increase burden on State Exchanges and issuers that do not currently auto re-enroll catastrophic coverage enrollees.

Response: For a more detailed of these comments and our responses, see the preamble for § 155.335(j).

Comment: A few commenters suggested that the proposed policy could impact the individual market risk pool. One commenter stated that the policy would have a net positive effect on the individual market risk pool, which would benefit market stability and affordability overall, because it would increase enrollment in comprehensive coverage among individuals who age out of catastrophic coverage. A few commenters stated that the policy could help stabilize the individual market by improving continuity of coverage. One commenter voiced concern about automatically re-enrolling those losing catastrophic coverage eligibility into a bronze or higher coverage level QHP because this would transfer risk from the catastrophic risk pool into the non-catastrophic individual market risk pool for the HHS risk adjustment program, and because enrollees changing from catastrophic to a higher level of coverage would likely see premium increases. However, the commenter noted that in some cases this increase could be offset by APTC for eligible individuals and by lower out-of-pocket costs and expressed general support for actions to prevent enrollees from becoming uninsured.

Response: We agree that promoting continuity of coverage can help stabilize the individual market risk pool. However, we do not believe that the policy will have a significant impact on the individual market risk pool given the small number of catastrophic coverage enrollees. For example, during the 2022 open enrollment period for Exchanges on the Federal platform, total health plan selections through *HealthCare.gov* for catastrophic coverage were less than one percent of total health plan selections, which was 42,087 out of over 10.2 million, or about 0.41 percent. During the 2023 open enrollment period, this total decreased to 28,903 out of over 12.2 million, just 0.24 percent.[352]

21. Premium Payment Deadline Extensions (45 CFR 155.400(e)(2))

We anticipate that the finalized amendment to § 155.400(e)(2) to codify that flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors is not limited to extensions of the binder payment will benefit issuers. Because HHS has already provided enforcement discretion in the past to account for such situations, we do not anticipate that there will be any additional costs for HHS associated with this finalized policy, nor do we anticipate any costs to interested parties.

We sought comment on these impacts and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

22. Initial and Annual Open Enrollment Periods (45 CFR 155.410)

We are finalizing amendments to § 155.410(e)(4) to revise parameters around the adoption of an alternative open enrollment period by a State Exchange not utilizing the Federal platform. We are finalizing that for benefit years beginning on or after January 1, 2025, State Exchanges must adopt an open enrollment period that begins on November 1 of the calendar year preceding the benefit year and ends January 15 of the applicable benefit year or later. We are also adding paragraph (e)(4)(iii) to grandfather the open enrollment period of any State Exchange that held an open enrollment period that began before November 1, 2023, and ended before January 15, 2024, for the 2024 benefit year so that it can continue to begin open enrollment before November 1 in consecutive future benefit years, so long as that State Exchange's open enrollment period continues uninterrupted for at least 11 weeks. If the State Exchange later changes the dates of its open enrollment period after the effective date of this rule, it must for that, and subsequent benefit years, hold an open enrollment period that is compliant with the requirements of (e)(4)(i) and (ii).We have previously observed that when open enrollment ends in December, certain consumers may be subjected to unexpected plan cost increases that they may not be notified about until January. For consumers in the vast majority of Exchanges, this policy will be beneficial for reducing such unexpected plan cost increases since most Exchanges will end on or after January 15. This policy will also ensure ample time for Navigators, certified application counselors, agents, and brokers to fully assist all interested consumers during open enrollment while also improving access to health coverage by giving consumers ample time to react to updated plan cost information and seek enrollment assistance, including consumers in underserved communities who face additional barriers to accessing health coverage. Finally, by reducing consumer confusion, increasing consumer access to assisters, and giving consumers more time to consider up-to-date plan cost information, this policy could increase QHP enrollment, benefiting all interested parties, including consumers, Exchanges, issuers, and assisters.

All 19 State Exchanges except one already meet these finalized parameters, beginning their annual open enrollment periods on November 1 and concluding on or after January 15 of the benefit year, pursuant to current § 155.410(e)(4)(ii). Since most State Exchanges already are aligned with the parameters described in the policy, we anticipate that this new amendment would have a *de minimis* impact and not impose significant additional burden overall.

We sought comment on this burden estimate and assumptions. We were particularly interested in comments regarding whether this proposal would impose a significant burden on outlying State Exchanges and interested parties (for instance, Navigators, assisters, issuers).

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

[352] 2022 and 2023 OEP State, Metal Level, and Enrollment Status Public Use Files: *see* Table 6: Enrollment Status by Metal Level.

23. Special Enrollment Periods—Effective Dates of Coverage (45 CFR 155.420(b))

We are finalizing amendments to § 155.420(b)(1) and (b)(3)(i) to align the effective dates of coverage after selecting a plan during certain special enrollment periods across all Exchanges, including State Exchanges, so that during a special enrollment period that follows the regular effective dates of coverage listed at § 155.420(b)(1), qualifying individuals or enrollees who select and enroll in a QHP receive coverage beginning the first day of the month after the consumer selects a QHP.

In the 2021 Payment Notice final rule (85 FR 29251), where this policy was finalized for Exchanges on the Federal platform, we noted that ensuring that consumers who select a plan during a special enrollment period using the regular effective dates at § 155.420(b)(1) receive coverage on the first day of the following month, rather than on the first day of the second month following plan selection, would result in several benefits, such as reducing consumer confusion and minimizing coverage gaps while also enhancing operational efficiency. In addition, we noted that the standardization of effective coverage dates for special enrollment periods provided using the regular effective dates at § 155.420(b)(1) would result in standardization for issuers due to more plans beginning in the same month, Exchanges, and consumers; the reduction of system errors and related casework, including reduced confusion among relevant consumer support staff; and simplified Exchange billing practices due to the expedited effective dates. We believe that, similarly, State Exchanges and the issuers and consumers in their States will also experience these benefits under the policy to align the effective coverage dates across all Exchanges for special enrollment periods that use the regular effective dates of coverage at § 155.420(b)(1) (unless an earlier coverage effective date were selected pursuant to § 155.420(b)(3), which would reduce potential burdens associated with this policy.

Additionally, we expect that issuers will not incur substantial new costs as a result of applying this policy across Exchanges since they routinely effectuate coverage on the first of the month following plan selection or earlier when permitted or required under applicable regulation. We expect that consumers in States which do not currently apply this policy will also benefit from a faster effectuation of coverage, as this will result in fewer coverage gaps for consumers transitioning between or newly enrolling in a health insurance plan.

We sought comment on these assumptions.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the policy to align effective dates of coverage during certain special enrollment periods across all Exchanges.

Comment: One commenter expressed concern that this policy would lead to increased adverse selection by consumers and would lead to increased costs to insurers.

Response: The commenter did not provide evidence or examples of why adverse selection would increase, nor have we received information from issuers that operate in State Exchanges that follow similar effective dates of coverage that adverse selection increased. In addition, we believe the benefit of reducing coverage gaps in consumers outweighs this potential harm. As a result, we are finalizing this policy as proposed.

24. Special Enrollment Periods—Monthly Special Enrollment Period for APTC-Eligible Qualified Individuals With a Projected Annual Household Income at or Below 150 Percent of the Federal Poverty Level (45 CFR 155.420(d)(16))

We are finalizing amendments to § 155.420(d)(16) to revise the parameters around the availability of a special enrollment period (SEP) for APTC-eligible qualified individuals with a projected annual household income at or below 150 percent of the Federal Poverty Level (FPL), hereinafter referred to as the ''150 percent FPL SEP.'' Specifically, we are finalizing to remove the limitation that this SEP is only available to a consumer whose applicable percentage, which is used to determine the amount of the consumer's premium not covered by APTC, is zero percent, a circumstance provided for under section 9661 of the ARP and later under the IRA.

The impact of this policy will be zero if enhanced subsidies under the IRA are continued beyond 2025. It is difficult to estimate, with confidence, the impacts of this policy on premiums, APTC payments, and enrollment if the enhanced subsidies are not continued, and we note that those impacts are likely to be quite different by State. However, under various scenarios, we estimated that if this policy were to be finalized, national premiums in the individual market could increase by an average of 3 to 4 percent for plan year 2026 when the enhanced PTC provisions of the IRA are due to expire. We would expect that any average national impact would have a high variance between States that have expanded Medicaid coverage compared to States that have not, because States that have not expanded Medicaid coverage are likely to have more consumers with projected annual household income below 150 percent FPL applying for coverage through the Exchange. Unknown factors making these parameters difficult to estimate include the utilization of this SEP by healthy and unhealthy enrollees, the impact to the average duration of coverage for enrollees, and additional policy changes between now and 2025. At an aggregate level, APTC outlays could increase nationally up to $2 billion to $3 billion beginning in 2026. The direction and magnitude of enrollment changes in the individual market is also highly uncertain.

We sought comment on these estimates, including on the premium impacts at the State level, but did not receive responses.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

25. Termination of Exchange Enrollment or Coverage (45 CFR 155.430)

We anticipate that the policy to permit enrollees in Exchanges on the Federal platform to retroactively terminate coverage back to the date in which they retroactively enroll in Medicare Part A or B (including enrollment in Parts A or B through a Medicare Advantage plan), but no earlier than (a) the day before the first day of coverage under Medicare Parts A or B or a Medicare Advantage plan, and (b) the day that is 6 months before retroactive termination of QHP coverage is requested, will benefit enrollees by allowing them to avoid an overlap in coverage and paying premiums for coverage they do not need. We anticipate that there may be some minor costs for the FFE associated with implementing this policy, which is at the option of HHS, such as processing the additional requests for retroactive terminations of coverage allowed by this policy. However, we do not have adequate data to estimate the number of requests for retroactive termination HHS is likely to receive, and so we cannot provide an estimate for these costs, nor for the amount of APTC that is likely to be returned to the government as a

result of this policy. In addition, we anticipate that there would be a minor financial impact to issuers associated with processing the additional retroactive termination requests allowed by this policy, including reversing claims and refunding premium paid by the enrollee, but we likewise do not have adequate data to estimate these costs.

Finally, we also anticipate that there may be a financial impact to State Exchanges associated with implementing this policy, which is optional for State Exchanges. However, we do not have access to the data necessary to estimate the costs to State Exchanges associated with implementing this policy, nor do we have access to the data necessary to determine how long it will take State Exchanges to implement it.

We sought comment on these impacts and assumptions, as well as any additional data sources we could use to estimate the costs associated with this proposal.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

26. Establishment of Exchange Network Adequacy Standards (45 CFR 155.1050)

Under § 155.1050(a)(2)(i)(A), we are finalizing that for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must establish and impose quantitative time and distance network adequacy standards for QHPs that are at least as stringent as standards for QHPs participating on the FFEs under § 156.230(a)(2)(i)(A). For these purposes, ''as stringent as'' means time and distance standards that use a specialty list that includes at least the same specialties as our provider specialty lists and time and distance parameters that are at least as short as our parameters. States will be permitted to implement network adequacy standards that are more stringent than those performed by the FFEs under § 156.230. In other words, States could use a specialty list that is broader than our specialty lists, but it must include all the provider specialties included in our lists. Similarly, the time and distance parameters could also be narrower than our parameters, meaning they could require shorter time and/or distances, but they cannot be less demanding than our time and distance parameters. Consistent with the standards for the FFEs, and to strengthen QHP enrollees' timely access to a variety of providers to meet their health care needs, the State Exchanges and SBE–FPs' time and distance standards will be calculated at the county level and vary by county designation. State Exchanges and SBE–FPs will be required to use a county type designation method that is based upon the population size and density parameters of individual counties. Under this policy, the time and distance standards State Exchanges and SBE–FPs will establish and impose will apply to our provider specialty lists. To count towards meeting the time and distance standards, individual and facility providers in these lists will have to be appropriately licensed, accredited, or certified to provide services in their State, as applicable, and will need to have in-person services available.

Second, we are finalizing that, for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews prior to certifying any plan as a QHP, consistent with the reviews conducted by the FFEs under § 156.230. Specifically, we are finalizing at § 155.1050(a)(2)(i)(B) that, for plans years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must conduct quantitative network adequacy reviews to evaluate a plan's compliance with network adequacy standards under § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(2)(i)(A) prior to certifying any plan as a QHP, while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4). Under these flexibilities, the issuer will include its justification as part of its QHP application and describe how the plan's provider network provides an adequate level of service for enrollees and how the plan's provider network will be strengthened and brought closer to compliance with the network adequacy standards prior to the start of the plan year. The issuer will be required to provide information as requested by the State Exchange or SBE–FP to support the justification. State Exchanges and SBE–FPs will be required to review the issuer's justification to determine whether making such health plan available through the Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates as specified under § 156.230(a)(3). In making this determination, the factors State Exchanges and SBE–FPs could consider include whether the justification is reasonable based on circumstances such as the local availability of providers and variables reflected in local patterns of care. If the State Exchange or SBE–FP determines that making such health plan available through its Exchange is in the interests of qualified individuals in the State or States in which such Exchange operates, it could then certify the plan as a QHP. Under this policy, State Exchanges and SBE–FPs will be prohibited from accepting an issuer's attestation as the only means for plan compliance with network adequacy standards.

We are aware that some States Exchanges employ robust, quantitative network adequacy standards that differ from those used by the FFEs, but still ensure that QHPs provide consumers with reasonable, timely access to practitioners and facilities to manage their health care needs, consistent with the ultimate aim of these policies. Therefore, we are finalizing § 155.1050(a)(2)(ii) to provide that, for plan years beginning on or after January 1, 2026, HHS may grant an exception to the requirements described under § 155.1050(a)(2)(i) to a State Exchange or SBE–FP that demonstrates with evidence-based data, in a form and manner specified by HHS, that (1) the Exchange applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4); and (2) the Exchange evaluates whether plans comply with applicable network adequacy standards prior to certifying any plan as a QHP. In this final rule, for this exceptions process, we are clarifying that, for (1) above, issuers on the State Exchanges and SBE–FPs do not need to comply with the appointment wait time standards under § 156.230(a)(2)(i)(B).

Lastly, we are finalizing § 155.1050(a)(2)(i)(C) to provide that, for plan years beginning on or after January 1, 2026, State Exchanges and SBE–FPs must require that all issuers seeking certification of a plan as a QHP submit information to the Exchange reporting whether or not network providers offer telehealth services. This data will be for informational purposes; it will be intended to help inform the future development of telehealth standards and will not be displayed to consumers. We note that this policy is not intended to suggest that telehealth services will be counted in place of in-person service access for the purpose of meeting network adequacy standards for PY 2025. While we acknowledge the growing importance of telehealth, we want to ensure that telehealth services do not reduce the availability of in-person care. For this purpose, telehealth encompasses professional consultations,

office visits, and office psychiatry services delivered through technology-based methods, including virtual check-ins, remote evaluation of pre-recorded patient data, and inter-professional internet consultations. Currently, for issuers in FFEs to comply with telehealth reporting standards, issuers must indicate whether each provider offers telehealth with the options ''Yes,'' ''No,'' or ''Requested information from the provider, awaiting their response.'' We are finalizing the policy that State Exchanges and SBE–FPs also impose this same standard.

As discussed in the information collection requirements section of this final rule, we estimate that the total annual burden associated with State Exchanges and SBE–FPs establishing and imposing the finalized network adequacy standards, conducting the network adequacy reviews as finalized, collecting telehealth information from issuers seeking QHP certification, and submitting any exception to be up to 19,800 hours and to have a total cost of $1,365,012 per year. This estimate includes State Exchanges and SBE–FPs developing the finalized standards, reviewing any issuer justification, and submitting any exception requests to HHS. We further estimate that the total annual burden associated with both medical QHP and SADP issuers in State Exchanges and SBE–FPs gathering and submitting the time and distance and telehealth data, including any justification, to the respective State Exchanges or SBE–FPs beginning in 2025 would be approximately $114,992.

As discussed in the information collection requirements section of this final rule, the requirement that State Exchanges and SBE–FPs collect telehealth data may increase related administrative costs for State Exchange and SBE–FP issuers that do not already possess these data, though many issuers already collect and submit this information for network adequacy submissions in other markets. While we anticipate that increased burden related to telehealth data collection will be minimal for many State Exchange and SBE–FP issuers, the increased burden could ultimately lead to an increase in premiums for consumers. As noted previously, we believe that obtaining telehealth information and using it to inform future network adequacy standards is in the best interests of both QHP enrollees and QHP issuers. As such, we anticipate that the additional burden will be outweighed by the expected benefits.

We sought comment on the potential costs and benefits associated with this proposal.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the establishment of Exchange network adequacy standards policy below.

Comment: A few commenters expressed opposition to the collection of information about which providers offer telehealth services indicating that the proposed rule underestimated the burden of this proposal and that the information would not capture the availability of telehealth services.

Response: We believe that the telehealth reporting standards, pursuant to which issuers in State Exchanges and SBE–FPs must indicate whether each network provider offers telehealth services with the options ''Yes,'' ''No,'' or ''Requested information from the provider, awaiting their response,'' would not require extensive administrative time to gather. Approximately half of the parent companies of issuers on the State Exchanges and over two thirds of the parent companies of issuers on SBE–FPs offer Medicare Advantage plans, and Medicare Advantage offers a telehealth credit for network adequacy. Therefore, many more issuers on State Exchanges and SBE–FPs likely already have access to this information. We also believe that QHP issuers that do not currently collect this information may do so using the same means and methods by which they already collect information from their network providers relevant to time and distance standards and provider directories. For these reasons, we estimate that any additional burden resulting from the requirement that QHP issuers report whether each network provider is furnishing telehealth services would be minimal.

We stated in the proposed rule (88 FR 82591, 82638 through 82639) that this data would be for informational purposes, would be intended to help inform the future development of telehealth standards, and would not be displayed to consumers. We believe that the above-described telehealth reporting standards support these objectives by providing State Exchanges and SBE–FPs with a general picture regarding the availability of telehealth services in their State. Additionally, at this time, since this data will not be displayed to consumers, it is not necessary for State Exchanges and SBE–FPs to collect more granular telehealth data from their issuers.

27. FFE and SBE–FP User Fee Rates for the 2025 Benefit Year (45 CFR 156.50)

We are finalizing an FFE user fee rate of 1.5 percent of monthly premiums for the 2025 benefit year, which is a decrease from the 2.2 percent FFE user fee rate finalized in the 2024 Payment Notice (88 FR 25845 through 25847). We are also finalizing an SBE–FP user fee rate of 1.2 percent for the 2025 benefit year, which is a decrease from the 1.8 percent SBE–FP user fee rate finalized in the 2024 Payment Notice. Based on our estimated costs, enrollment (including anticipated transitions of States from the FFE and SBE–FP models to either the SBE–FP or State Exchange model, increased Open Enrollment numbers and anticipated Medicaid redeterminations), premiums for the 2025 benefit year, and user fee rates, we are estimating that FFE and SBE–FP user fee transfers from issuers to the Federal Government will be $340 million lower compared to those estimated for the prior benefit year. We also anticipate that the lower user fee rates may exert downward pressure on premiums.

We sought comment on the impact estimates and assumptions in the proposed rule (88 FR 82639).

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these lower estimates.

28. State Selection of EHB-Benchmark Plans for Plan Years Beginning On or After January 1, 2026 (45 CFR 156.111)

For plan years beginning on or after January 1, 2026, we are finalizing revisions to the standards for State selection of EHB-benchmark plans at § 156.111 to consolidate the options for States to change EHB-benchmark plans at § 156.111(a); revisions to the regulatory standard for States to comply with scope of benefit requirements at § 156.111(b)(2); and revisions to § 156.111(e)(3) to require States to submit a formulary drug list as part of their application to change EHB-benchmark plans only if the State is seeking to change its prescription drug EHB.

We understand that certain aspects of the current process to change EHB-benchmark plans under § 156.111 may impose unanticipated difficulty for and burden on States, and we have received feedback that this difficulty can have a chilling effect on States' ability to make more frequent or more substantial changes to their EHB-benchmark plans. We believe that, to the extent States take advantage of the finalized changes to the EHB-benchmark plan standard, States

will experience an overall decrease in burden to develop new EHB-benchmark plans compared to if they were to do so under the existing requirements at § 156.111. We anticipate that these policies will reduce the burden on States to perform additional actuarial analyses to comply with the typicality and generosity standards at § 156.111(b)(2)(i) and (ii), respectively. Instead of performing an indeterminate number of actuarial analyses to find a typical employer plan with an actuarial equivalent scope of benefits, a State may only need to perform two such actuarial analyses to identify the State's least generous typical employer plan and the State's most generous typical employer plan. Further, States will no longer need to perform an actuarial analysis to demonstrate compliance with the generosity standard at § 156.111, which we are removing as a requirement in this final rule. As a result, we estimate an overall decrease in burden to States utilizing this finalized provision to change their EHB-benchmark plan.

We also estimate a potential increase in burden to States and issuers to develop new policies and implement new plan designs, to the extent these finalized changes would result in more frequent or more substantial changes to EHB-benchmark plans by States. It is our aim that these policies will allow States and issuers to offer more comprehensive and innovative benefit structures that benefit the consumer, including by addressing health equity concerns.

However, we realize that this policy will have varied impact on consumers depending on how a State chooses to implement these changes. To the extent these finalized changes result in more frequent or more substantial changes to EHB-benchmark plans by States, consumers enrolled in individual and small group market plans will be impacted by changes to EHB in that their benefits may change, and in some cases, premiums could increase or decrease depending upon State implementation of the policies. CMS has approved changes in nine EHB-benchmark plans since 2018. Every approved EHB-benchmark plan application was estimated an increase in premiums of less than one percent.[353] While we expect the amendments to § 156.111 finalized in this rule will result in consistent or marginally higher increases in premiums for plans in States that change EHB-benchmark plans to add benefits, we still expect any such increase in premiums to be around one percent.

Additionally, a State's EHB-benchmark plan selection may impact the amount of APTC and CSRs for enrollees in a State. For these consumers, subsidies will increase or decrease when compared to their State's current EHB-benchmark plan. PTC is available only for that portion of a plan's premium attributed to EHB, so to the extent that a State's EHB-benchmark plan leads to lower premiums for the second lowest cost silver plan, APTC will be reduced, but not the percent of income a consumer with APTC is expected to contribute to their premium. This effect will represent a transfer from consumers who receive APTC to the Federal Government. Individual and small group market enrollees who do not receive APTC would experience lower premiums for less comprehensive coverage that could result in more affordable coverage options but possibly higher out-of-pocket costs for the consumer. To the extent that a State's EHB-benchmark plan leads to higher premiums for the second lowest cost silver plan, we expect the opposite outcome to occur. Given the nine previously approved State EHB-benchmark plan changes, we expect the amendments to § 156.111 finalized in this rule will result in around a one percent increase in premium costs for the second lowest cost silver plan in State(s) that seek to update their EHB-benchmark plans with corresponding impacts on PTC.

It is not possible to provide more specific estimations for the potential cost impacts of these policy changes due to the number of unascertainable variables in projecting future State EHB-benchmark plan selections and how those selections could influence changes in the premiums of plans to cover those EHB, and therefore, cost to the Federal Government in the form of APTC. These variables include but are not limited to: the number of States that choose to pursue EHB-benchmark plan updates, the scope of benefits among the set of typical employer comparison plans in each of those States, the number and types of benefits each State looks to add to or subtract from their EHB-benchmark plan, and the variable cost and utilization of those benefits, especially as they may change over time.

Consumers who have specific health needs may also be impacted by the finalized changes. In the individual and small group markets, depending on the selection made by the State in which the consumer lives, consumers with more comprehensive plans may gain coverage for certain services. In other States, again depending on State choices, consumers may no longer have coverage for some services, though we note that no State has sought to remove benefits from their EHB-benchmark plan to date under § 156.111.

Although we cannot anticipate in advance exactly how States might adjust their EHB-benchmark plan applications as a result of these amendments, and as States are not required to make any changes to their EHB-benchmark plans, we also believe the reduced burden might produce premium savings in the long-term, as States will have greater incentive to update their EHB-benchmark plans more frequently and more substantively. We believe that States with more regular and more substantive EHB-benchmark plan changes would better respond to public health priorities and may adjust benefits in ways that could more cost-effectively contribute to greater overall population health, which would improve the health of the State's risk pool over time, reducing cost to insurers, therefore potentially enabling issuers to reduce plan premiums, increasing affordability of health insurance for consumers in the individual and small group markets in the State.

We stress that States would not be required to make any changes under this policy; as already implemented at § 156.115(d)(1), if a State does not make an EHB-benchmark plan selection by the first Wednesday in May of the year that is 2 years before the effective date of the new EHB-benchmark plan, or its benchmark plan selection does not meet the requirements of this section and section 1302 of the ACA, the State's EHB-benchmark plan for the applicable plan year will be that State's EHB-benchmark plan applicable for the prior year.

As discussed in the ICR for this policy, we anticipate a total annual cost estimate associated with this policy of approximately $18,036, in addition to the potential effects on premium costs and therefore PTC discussed elsewhere.

We sought comments on the impact of these proposals on the EHB-benchmark plan selection process and whether other impacts should be considered.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the proposed updates to the process for State Selection of EHB-benchmark plans below.

[353] The actuarial analyses for all EHB-benchmark plan changes are available at *https://www.cms.gov/marketplace/resources/data/essential-health-benefits.*

Comment: A few commenters supported the estimates, noting that the proposals clarifying and improving the process for States to determine and update EHB will reduce the time and costs to States seeking to update their EHB-benchmark plan. One commenter suggested that a less burdensome approach to the typicality and generosity standards under the EHB-benchmark plan process will enable States to focus more of their energy on assessing the package of benefits that would be most valuable to include as EHB. Another commenter similarly suggested that the reduced administrative burden on State actuaries will provide resources that can be utilized to perform the network adequacy oversight requirements also included in this rule.

Response: We agree with these commenters that the estimated reduced administrative burden on States resulting from this policy will afford States flexibility to allocate their resources towards other important policy aims, including those pertaining to EHB and network adequacy.

Comment: A few commenters expressed concern regarding the potential APTC impacts of the proposed revisions to § 156.111. Specifically, these commenters expressed two concerns: (1) that, generally, making the EHB-benchmark plan update process simpler and less burdensome could lead to increased EHB-benchmark plan changes and potentially expansions of coverage, which could be costly, and (2) that removing the generosity standard at § 156.111(b)(2)(ii) would enable States to increase the generosity of their EHB-benchmark plans ad infinitum, which would lead to equally increasing APTC expenditures.

Response: We agree with commenters on the first point, that a simpler and less burdensome EHB-benchmark plan update process may incentivize more frequent EHB-benchmark plan updates. However, we believe that this is a positive impact of the proposed provisions, which for the reasons discussed elsewhere in this rule, has the potential to both improve consumer health and reduce Federal outlays in the form of PTC in the long run. The nine States that have sought to update their EHB-benchmark plans under § 156.111 thus far have done so by affecting only modest, thoughtful increases in plan generosity, even when they could have increased generosity more substantially. As such, we are not concerned that a marginally more straightforward and less costly EHB-benchmark plan update approach will elicit very different reactions from States than those we have already observed, in which generosity increases, and therefore potentially PTC cost increases, have been modest. Further, while we may expect that that the majority of applications we will receive from States to change EHB-benchmark plans with these new flexibilities will seek to add or improve the existing scope of benefits, we also do not discount or preclude the possibility that a State may change its EHB-benchmark plan by reducing the scope of benefits by removing benefits that may no longer be clinically effective or high-value for its population.

Moreover, we disagree with commenters on the second point—that the removal of the generosity standard creates an environment in which States can add significantly more generous benefits to their EHB-benchmark plans with impunity. Rather, as discussed elsewhere, while we are finalizing the removal of the generosity standard at § 156.111(b)(2)(ii), the typicality standard at § 156.111(b)(2)(i) will still require that State EHB selections be constrained to a particular scope of benefits by demonstrating their EHB-benchmark plan is as or less generous than the most generous plan among a set of typical employer comparison plans. We believe this requirement will sufficiently balance States' desired flexibility to design a benefit package that best fits the needs of their consumers, while also ensuring that coverage does not become unaffordable, nor unreasonably increase Federal outlays in the form of PTCs.

29. Provision of EHB (45 CFR 156.115)

We are finalizing the removal of the regulatory prohibition at § 156.115(d) on issuers from including routine non-pediatric dental services as an EHB. We are also finalizing that the changes at § 156.115(d) will be effective beginning with PY 2027.

Removing the prohibition on issuers from including routine non-pediatric dental services as an EHB will remove regulatory and coverage barriers to expanding access to non-pediatric dental benefits. This will allow States greater flexibility to add benefits to improve non-pediatric oral health and overall health outcomes, which are disproportionately low among marginalized communities such as people of color and people with low incomes. Therefore, this policy will promote health equity by addressing non-pediatric oral health disparities and improving the health outcomes of vulnerable populations.

Pursuant to section 2707(b) of the ACA, a group health plan must ensure that any annual cost sharing imposed under the plan does not exceed the limitations provided for under section 1302(c)(1) of the ACA. To the extent that a group health plan selects an EHB-benchmark plan that includes routine non-pediatric dental coverage as an EHB, such plan will need to ensure that any cost sharing for those services is limited in accordance with section 1302(c)(1) of the ACA.

We do not anticipate any immediate costs to the Federal Government, States, issuers, or enrollees because of this policy. This policy will simply remove the prohibition on issuers from including routine non-pediatric dental services as an EHB; it will not automatically make any routine non-pediatric dental services an EHB. This policy will only have a premium impact to the extent that States choose to include routine non-pediatric dental services in their EHB-benchmark plans. It may also increase costs for issuers to expand their networks to cover these new required services, although issuers could contract with a dental vendor to administer the routine non-pediatric dental EHB if such a benefit is adopted by a State as an EHB. It should also be noted that the size of non-pediatric dental networks varies by State. Therefore, some States would be affected by the need to build a new network of dental providers (or contract with dental vendors) more than others. It is up to each State to consider the potential costs and network burden and determine whether to add routine non-pediatric dental services as an EHB.

We sought comment on the impact of this proposal to remove the regulatory prohibition on issuers from including routine non-pediatric dental services as an EHB and whether other impacts should be considered.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received regarding the routine non-pediatric dental EHB policy below.

Comment: One commenter noted that removing the restriction on adult dental care would allow States to include it in their benchmark plans if they choose to do so and expressed concern that this could raise affordability issues for members as well as operational concerns. They recommended that HHS coordinate with health plan actuaries and others to conduct a thorough and realistic analysis of potential cost impact to individual and small group members before finalizing the proposal.

Response: We thank the commenter for their feedback. Please refer to III.E.3 of this final rule for a detailed response to potential cost and operational concerns for this policy. We emphasize that States adding routine non-pediatric dental benefits as EHB are still required to comply with the scope of benefits requirements at § 156.111(b)(2) and must design their EHB-benchmark plans with that limitation in mind. Accordingly, any increases in premium and PTC resulting from a State adding routine non-pediatric dental benefits as EHB is limited by those scope of benefit requirements. CMS has approved changes in nine EHB-benchmark plans since 2018. Every approved EHB-benchmark plan application has estimated an increase in premiums of less than one percent.[354] With the revisions to § 156.111 and § 156.115 in this rule, we still expect any such increase in premiums to be around one percent, even for States that add routine non-pediatric dental benefits as EHB.

Given that States are the primary enforcers of EHB and this policy is optional for States to adopt, we emphasize that the decision to add routine non-pediatric dental benefits as an EHB is entirely up to each individual State. Each State considering adding this benefit should weigh the advantages against the disadvantages before implementing this policy. Therefore, we recommend that States interested in adding routine non-pediatric dental benefits as an EHB coordinate with health plan actuaries and other relevant stakeholders to conduct a thorough analysis of the potential cost impact before implementing this policy, should the State see a benefit to conducting such an analysis. We also anticipate that the benefit design, cost, and operational impacts will vary heavily by each State.

30. Prescription Drug Benefits (45 CFR 156.122)

At § 156.122(a)(3)(i), we are finalizing updates to P&T membership standards by adding new § 156.122(a)(3)(i)(E), which will require the P&T committee to include a patient representative as part of its membership for plan years beginning on or after January 1, 2026. While there is no Federal requirement to provide compensation to P&T committee members, those plans or issuers that choose to compensate their P&T committee members for their service to the committee may incur a nominal fee when adding an additional member to the committee. Further, we estimate a potential increase in burden to States and issuers to develop criteria used to select a consumer representative for the P&T committee, to create or revise standard operating procedures for the committee, as well as for any additional training that may be required of the selectee because of the new membership standard. We believe that the impact of this burden will be most notable during the initial plan year that this policy goes into effect and should be minimal in future years. We solicited comments on the impact of this proposal to the P&T committee membership standards and whether other impacts should be considered. We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

We also are finalizing amendments to § 156.122 to codify the requirement for coverage of prescription drug benefits. Specifically, we are finalizing amendments to § 156.122 by adding a new § 156.122(f) to further clarify that, to the extent that a health plan covers prescription drugs in excess of the benchmark, these drugs will be considered EHB and are subject to requirements including the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits. This policy will apply unless the coverage of the drug is mandated by State action and is in addition to EHB pursuant to § 155.170, in which case the drug will not be considered EHB. Given that this revision merely codifies our existing policy regarding the coverage of prescription drugs as EHB, we do not anticipate any additional burden on States or issuers.

We sought comment on these impact estimates and assumptions.

After consideration of comments and for the reasons outlined in the proposed rule and our responses to comments, we are finalizing the burden estimates as proposed. We summarize and respond to public comments received below.

Comment: One commenter asked that HHS clarify whether the proposed amendment at § 156.122 to add paragraph (f), which states that drugs in excess of those covered by a State's EHB-benchmark plan are considered EHB, is not applicable to the large group market and self-insured plans and, if not, requested an updated cost estimate to reflect the projected impact that this change would have on self-insured plan sponsors and beneficiaries.

Response: As described earlier, the proposed rule addressed the application of this policy with respect to individual and small group market plans. We are finalizing this proposal as proposed. Accordingly, this final rule does not address the application of this policy to large group market health plans, grandfathered group health plans, and self-insured group health plans.

31. Standardized Plan Options (45 CFR 156.201)

We are finalizing updates to the standardized plan options for PY 2025 with minor changes to ensure these plans continue to have AVs within the permissible *de minimis* range for each metal level. We believe that maintaining a high degree of continuity in the approach to standardized plan options year over year minimizes the risk of disruption for interested parties, including issuers, agents, brokers, States, and enrollees. We believe that making major departures from the approach to standardized plan options set forth in the 2023 and 2024 Payment Notices could result in changes that may cause undue burden for interested parties. For example, if the standardized plan options we create vary significantly from year to year, those enrolled in these plans could experience unexpected financial harm if the cost sharing for services they rely upon differs substantially from the previous year. Ultimately, we believe consistency in standardized plan options is important to allow both issuers and enrollees to become accustomed to these plan designs.

Thus, like the approach taken in the 2023 and 2024 Payment Notices, we are finalizing a standardized plan options that will continue to resemble the most popular QHP offerings that millions of consumers are already enrolled in. As such, these finalized standardized plan options are based on updated PY 2023 cost sharing and enrollment data to ensure that these plans continue to reflect the most popular offerings in the Exchanges.

By finalizing a policy to maintain an approach to standardized plan options like that taken in the 2023 and 2024 Payment Notices, issuers will continue to be able to utilize many existing benefit packages, networks, and formularies, including those paired with standardized plan options for PY 2024. Also, issuers will continue to not be required to extend plan offerings beyond their existing service areas.

Furthermore, as discussed earlier in the preamble, we will continue to differentially display standardized plan options on *HealthCare.gov* per § 155.205(b)(1). Since we will continue to assume responsibility for differentially displaying standardized

[354] The actuarial analyses for all EHB-benchmark plan changes are available at: *https://www.cms.gov/marketplace/resources/data/essential-health-benefits.*

plan options on *HealthCare.gov,* FFE and SBE–FP issuers will continue to not be subject to this burden.

In addition, as noted in the preamble, we will continue enforcement of the standardized plan option display requirements for approved web-brokers and QHP issuers using a direct enrollment pathway to facilitate enrollment through an FFE or SBE–FP—the Classic DE and EDE Pathways—at §§ 155.220(c)(3)(i)(H) and 156.265(b)(3)(iv), respectively. We believe that continuing the enforcement of these differential display requirements will not impose a significant burden on these entities or require major modification of their non-Exchange websites, especially since the bulk of this burden was previously imposed in the 2018 Payment Notice,[355] which finalized the standardized plan option differential display requirements, or during the PY 2023 open enrollment period, when enforcement of these requirements resumed.

Finally, since we will continue to allow approved web-brokers and QHP issuers to submit requests to deviate from the manner in which standardized plan options are differentially displayed on *HealthCare.gov,* the burden on these entities will continue to be minimal. We intend to continue providing access to information on standardized plan options to web-brokers through the Health Insurance Marketplace Public Use Files (PUFs) and QHP Landscape file to further minimize burden by ensuring that affected entities have timely access to accurate and helpful information on standardized plan option requirements, including those related to the differential display of these plans.

We sought comment on these impact estimates and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

32. Non-Standardized Plan Option Limits (45 CFR 156.202)

In this final rule, we are finalizing permitting issuers to offer non-standardized plan options in excess of the limit of two per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area for PY 2025 and subsequent years, if issuers demonstrate that these additional non-standardized plans beyond the limit at § 156.202(b) have specific design features that would substantially benefit consumers with chronic and high-cost conditions and meet other requirements finalized in this rule.

Specifically, at § 156.202(d), for PY 2025 and subsequent years, an issuer may offer additional non-standardized plan options for each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area if it demonstrates that these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area, subject to the criteria discussed below.

We finalized several specifications for issuers seeking to utilize this exceptions process at § 156.202(d)(1) through (6). Specifically, at paragraph (d)(1), the 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions will be evaluated at the level of total out-of-pocket costs for the treatment of the chronic and high-cost condition for a population of enrollees with the relevant chronic and high-cost condition. At paragraph (d)(2), the reduction in cost sharing must not be limited to a part of the year, or an otherwise limited scope of benefits. At paragraph (d)(3), the reduction in cost sharing for these benefits cannot be conditioned on a consumer having a particular diagnosis.

At paragraph (d)(4), the required reduction in cost sharing only applies to the standard variant of the plan for which an issuer seeks an exception, and not to the income-based cost-sharing reduction plan variations required by § 156.420(a), nor to the zero and limited cost sharing plan variations required by § 156.420(b). At paragraph (e)(5), issuers are limited to one exception per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, for each chronic and high-cost condition. At paragraph (d)(6), the chronic and high-cost conditions that may qualify an issuer for this exception will be determined by HHS. Refer to § 156.202 of the preamble to this rule for a more detailed discussion regarding these requirements.

We do not anticipate that the exceptions process finalized in this rule will substantially impact the average weighted number of non-standardized plan options available to each consumer, the average weighted number of standardized plan options available to each consumer, the average weighted number of total plan options available to each consumer, the number of plan-county discontinuations, or the number of affected enrollees since we do not anticipate a substantial number of issuers will utilize this exceptions process to offer the aforementioned additional non-standardized plan options that will substantially benefit consumers with chronic and high-cost conditions. This is because we expect that most issuers will believe that the burden of creating and certifying additional plans intended to benefit a comparatively small population of consumers outweighs the benefit of doing so.

Although we do not anticipate that a substantial number of issuers will utilize this exceptions process, we acknowledge that issuers that choose to do so will be impacted. Specifically, if issuers choose to utilize this exceptions process, they will be required to design additional non-standardized plan options and proceed through QHP certification for these plans, which will necessarily entail additional burden.

Additionally, at § 156.202(e), an issuer that seeks to utilize this exceptions process is required to submit a written justification in a form and manner and at a time prescribed by HHS. At paragraph (e)(1), the written justification must identify the specific chronic and high-cost condition that its additional non-standardized plan option offers substantially reduced cost sharing for, in accordance with the definition of ''cost sharing'' at § 156.20.

At paragraph (e)(2), the written justification must identify which benefits in the Plans and Benefits Template are discounted to provide reduced treatment-specific cost sharing for individuals with the specified chronic and high-cost condition. These discounts must be relative to the treatment-specific cost sharing for the same corresponding benefits in the issuer's other non-standardized plan offerings in the same product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area. For the purposes of this standard, treatment specific cost sharing consists of the costs for obtaining services that pertain to the treatment of a particular chronic and high-cost disease—but not the costs for obtaining services that do not pertain to the treatment of the relevant condition. The issuer must identify all services for which the benefits substantially reduce cost sharing in the Plans and Benefits

[355] These differential display requirements were first effective and enforced beginning with PY 2018. See 81 FR 94117 through 94118, 94148.

Template. These benefits must encompass a complete list of relevant services pertaining to the treatment of the relevant condition.

At paragraph (e)(3), the written justification must explain how the reduced cost sharing for these services pertains to clinically indicated guidelines and a representative treatment scenario for treatment of the specified chronic and high-cost condition (and include any relevant studies, guidelines, or supplementary documents to support the application, as applicable). For the purposes of this standard, a representative treatment scenario is an annual course of treatment for a chronic and high-cost condition.

At paragraph (e)(4), the written justification must include a corresponding actuarial memorandum that explains the underlying actuarial assumptions made in the design of the plan the issuer is requesting to except. In this memorandum, an issuer must demonstrate how the benefits that are discounted to provide reduced treatment-specific cost sharing of at least 25 percent identified at § 156.202(e)(2) for the treatment of the condition identified at § 156.202(e)(1) under the excepted plan compare to the identified in-limit offering in the same product network type, metal level, inclusion of dental and/or vision coverage, and service area. This demonstration must specifically be in reference to the specific population that would be seeking treatment for the relevant condition and not the general population. This memorandum also must include an actuarial opinion confirming that this analysis was prepared in accordance with the appropriate Actuarial Standards of Practice and the profession's Code of Professional Conduct.

We estimate the burden of this will be approximately $95,182 for an estimated 50 issuers annually, and we discuss this burden in further detail in the ICRs Regarding Non-Standardized Plan Option Limits (§ 156.202) section of the Collection of Information Requirements section of this final rule.

We also acknowledge that this exceptions process could impact consumers in a range of ways. Specifically, because we are finalizing the exceptions process, and if issuers choose to utilize this exceptions process to offer additional non-standardized plan options, consumers with qualifying chronic and high-cost conditions would benefit from reduced cost sharing for benefits that pertain to the treatment of these conditions. Reduced cost sharing for these benefits would reduce barriers to access to benefits important to consumers with chronic and high-cost conditions, which could play an important role in combatting health disparities and advancing health equity since disadvantaged populations [356] are disproportionately affected by many of these conditions.[357] In addition to enhancing health outcomes, this exceptions process could also reduce the risk of financial harm to individuals with chronic and high-cost conditions by reducing their cost sharing obligations for treatment for those conditions.

We do not have sufficient data to further estimate the costs associated with these finalized changes. As such, we sought comment from interested parties regarding cost estimates associated with this proposal and data sources that may be used to determine those estimates.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

33. CO-OP Loan Terms (45 CFR 156.520)

In this rule, we are finalizing revisions to § 156.520(f) to provide a clear mechanism by which an existing CO-OP may request termination of its loan agreement with CMS to enable it to pursue new, innovative business plans that are otherwise not compatible with CO-OP requirements, but which CMS believes will be in the best interest of affected consumers. Of the 23 CO-OP loan agreements CMS successfully executed with qualified borrowers in 2012, only 3 remain in operation as active insurance companies offering QHPs. The others have been placed in receivership by State regulators, or otherwise gone out of business due to the borrower's inability to establish a viable CO-OP that is financially stable and on course to ultimately repay the loans. As discussed in section III.E.8 of this preamble, CO-OPs operate under governance and product limitations that can present significant obstacles to new business opportunities. To provide a means to overcome these limitations, under the finalized revisions to § 156.520(f), we will be able to approve a request by a CO-OP to terminate its loan agreement with us for the purpose of permitting the CO-OP to pursue innovative business plans that are not otherwise consistent with CO-OP requirements, if all outstanding CO-OP loans issued to the loan recipient are repaid in full prior to termination of the loan agreement, and we believe that granting the request would benefit consumers by meaningfully enhancing consumer access to quality, affordable, member-focused, non-profit health care options in affected markets. Examples of such proposals that may be deemed innovative and in the interests of consumers would be plans that appear well-calculated to lead directly to marketing non-profit, member-focused health plans in new regions of a State, to offer health plans on a Statewide basis for the first time, to expand operations into new States, or enhance consumer access to new non-profit products that are not qualified health plans, in particular when such plans are likely to favorably impact traditionally underserved communities. These examples are illustrative, however, not exclusive.

This finalized regulatory policy also contemplates plans that involve non-profit enterprises, and that reflect a strong consumer focus. A strong consumer focus will generally consist of an enterprise that focuses informational or financial resources, or plans to focus informational or financial resources, on member-oriented programs such as health education, consumer education, or forms of direct or indirect health-related financial assistance. We recognize that significant coordination with State regulators will be essential to implementing any plans to act on the finalized regulatory changes.

Given that only three CO-OPs remain in business operating with small portfolios across five States, we do not believe there will be a significant economic impact because of this policy for at least several years, if ever.

We sought comment on these impact estimates and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

34. Conforming Amendment to Netting Regulation To Include Federal IDR Administrative Fees (45 CFR 156.1215)

We are finalizing amendments to § 156.1215(b) and (c) to align with the policies and regulations proposed in the Federal Independent Dispute Resolution Operations proposed rule (88 FR 75744). These finalized amendments will provide that administrative fees for utilizing the No Surprises Act Federal IDR process for health insurance issuers

[356] Disadvantaged populations are groups of persons that experience a higher risk of poverty, social exclusion, discrimination, and violence than the general population, including, but not limited to, ethnic minorities, migrants, people with disabilities, isolated elderly people, and children.

[357] Waters, H, & Graf, M. (2018). The Cost of Chronic Disease in the U.S. Milken Institute. *https://milkeninstitute.org/sites/default/files/reports-pdf/ChronicDiseases-HighRes-FINAL_2.pdf*

that participate in financial programs under the ACA would be subject to netting as part of HHS' integrated monthly payment and collections cycle.

To implement this policy, we are finalizing amendments to § 156.1215(b) to allow HHS to net payments owed to issuers and their affiliates operating under the same TIN against amounts due to the Federal Government from the issuers and their affiliates operating under the same TIN for APTC, advance payments of and reconciliation of CSRs, payment of FFE user fees, payment of SBE–FP user fees, HHS risk adjustment, reinsurance, and risk corridors payments and charges, and administrative fees from these issuers and their affiliates for utilizing the Federal IDR process in accordance with § 149.510(d)(2). We are also finalizing amendments to § 156.1215(c) to provide that any amount owed to the Federal Government by an issuer and its affiliates for unpaid administrative fees due to the Federal Government from these issuers and their affiliates for utilizing the Federal IDR process after netting under § 156.1215(b) will be the basis for calculating a debt owed to the Federal Government. We will not begin netting the Federal IDR administrative fees until disputing parties are required to pay Federal IDR administrative fees directly to HHS, if the proposal in Federal Independent Dispute Resolution Operations proposed rules (88 FR 75744) is finalized. We do not believe that the finalized amendments will impose substantial additional costs to HHS beyond the costs previously estimated in the Federal Independent Dispute Resolution Process proposed rule (88 FR 75814 through 75815). Furthermore, this policy will only apply to those issuers and their affiliates operating under the same TIN that participate in the financial programs under the ACA. Since the provisions of the Federal IDR process apply more broadly to include issuers and their affiliates that do not participate in the financial programs under the ACA currently specified in the list of programs for which netting is permitted (86 FR 55982),[358] we believe that only a small proportion of issuers that utilize the Federal IDR process will be subject to netting under this policy.

Therefore, we anticipate that this policy will streamline our payments and collections processes and limit the administrative burden for operating our programs.

We sought comment on these impact estimates and assumptions.

We did not receive any comments in response to the burden estimates for this policy. We are finalizing these estimates as proposed.

35. Regulatory Review Cost Estimation

If regulations impose administrative costs on private entities, such as the time needed to read and interpret this final rule, we should estimate the cost associated with regulatory review. Due to the uncertainty involved with accurately quantifying the number of entities that will review the rule, we assume that the total number of unique commenters on last year's final rule (286) will be the number of reviewers of this final rule. We acknowledge that this assumption may understate or overstate the costs of reviewing this rule. It is possible that not all commenters reviewed last year's rule in detail, and it is also possible that some reviewers chose not to comment on the final rule. For these reasons, we believe that the number of past commenters will be a fair estimate of the number of reviewers of this rule. We welcome any comments on the approach in estimating the number of entities which will review this final rule.

We also recognize that different types of entities are in many cases affected by mutually exclusive sections of this final rule, and therefore, for the purposes of our estimate we assume that each reviewer reads approximately 50 percent of the rule. We sought comments on this assumption.

Using the wage information from the BLS for medical and health service managers (Code 11–9111), we estimate that the cost of reviewing this rule is $100.80 per hour, including overhead and fringe benefits.[359] Assuming an average reading speed of 250 words per minute, we estimate that it would take approximately 7.25 hours for the staff to review half of this final rule. For each entity that reviews the rule, the estimated cost is $730.80 (7.25 hours × $100.80 per hour). Therefore, we estimate that the total cost of reviewing this regulation is approximately $209,009 ($730.80 per reviewer × 286 reviewers).

D. Regulatory Alternatives Considered

For the HHS-operated risk adjustment program (§ 153.320), we are finalizing recalibrating the CSR adjustment factors for AI/AN zero cost sharing and limited cost sharing CSR plan variant enrollees for the 2025 benefit year, and retaining the AI/AN CSR adjustment factors for future benefit years unless changed through notice-and-comment rulemaking. We are also finalizing maintaining the current CSR adjustment factors for silver plan variant enrollees (70 percent, 73 percent, 87 percent, and 94 percent AV plan variants) [360] for the 2025 benefit year and beyond, unless changed through notice-and-comment rulemaking. As an alternative, we considered not proposing any changes to the CSR adjustment factors used in the State payment transfer formula. However, after continuing to conduct analyses on more recently available enrollee-level EDGE data, we found the underprediction of plan liability in the State payment transfer formula for AI/AN zero-cost sharing and limited cost sharing CSR plan variant enrollees continued. We also considered recalibrating all the silver CSR adjustment factors. However, we are not finalizing any changes to those factors at this time, because we continue to find that the current silver CSR adjustment factors (70 percent, 73 percent, 87 percent, and 94 percent plan variants) are reasonably accurately predicted given the offsets, described above in VI.4, that continue to occur for these enrollees.

As an alternative to amendments to § 155.315(e), we considered using an electronic data source other than PUPS to verify applicant incarceration status. However, we estimate that sourcing an alternative national incarceration verification data source would be a significant expense to HHS, costing the agency approximately $35 million annually. Additionally, these other data sources are currently not sufficiently comprehensive to meet the needs of the Exchanges using the Federal eligibility and enrollment platform and therefore may not provide Exchanges with accurate results on a consistent basis. Thus, the alternative data source must be current, accurate, and minimize burden and costs to administration.

About the changes to § 155.320(c), we considered taking no action to add new language in paragraph(c)(1)(iii) that State Exchanges and State Medicaid and CHIP agencies must pay in advance for their use of the VCI Hub service to verify income. However, we determined that this finalized reinterpretation and policy change is appropriate given our better understanding of how the VCI Hub service is used by State Exchanges and State Medicaid and CHIP agencies to verify eligibility for QHP coverage or

[358] Explaining that the No Surprises Act applies to group health plans and health insurance issuers offering group or individual health insurance coverage in the Code, ERISA, and the PHS Act.

[359] *https://www.bls.gov/oes/current/oes_nat.htm.*

[360] See 83 FR 16930 at 16953; 84 FR 17478 through 17479; 85 FR 29190; 86 FR 24181; 87 FR 27235 through 27236; and 88 FR 25772 through 25774.

other insurance affordability programs. We also considered requiring State Medicaid and CHIP agencies and State Exchanges to obtain their own contracts to administer their CSI data usage; however, we had concerns that these services cannot be procured reasonably and expeditiously, which would undermine the system we have implemented under section 1413 of the ACA. We also believe that there may be benefits to the State Medicaid and CHIP agencies and State Exchanges that prefer to use the CSI data accessible through the VCI Hub service in their States. Therefore, we are finalizing retaining optional access to the VCI Hub service on behalf of State Medicaid and CHIP agencies and State Exchanges that prefer to continue to use this service and are willing to pay for their CSI data usage with a modification to the original proposal that would have required that States pay in advance. Under this finalized policy, State Medicaid and CHIP agencies and State Exchanges can choose to discontinue their use of the CSI data accessible through the VCI Hub service. We are also finalizing that HHS will invoice States on a monthly basis for their actual utilization of CSI data provided by the VCI Hub service after that utilization occurs.

About amending 155.330(d)(2), we considered maintaining the status quo for continuing the PDM requirements under § 155.330(d)(1)(i) and (d)(ii) but note that it may be difficult or infeasible to operationalize existing processes and operations during certain emergency situations. Allowing consumers to go uninsured during a national emergency, such as a public health emergency like the COVID–19 public health emergency, will not improve the national health and well-being of all consumers. We found it to be least burdensome for Exchanges to implement as a successful pause of PDM operations occurred during the 2020 pandemic.

We considered only updating sub-regulatory guidance to incorporate catastrophic coverage into the auto re-enrollment hierarchy, for example, through the annual draft and final Letters to Issuers. However, we believe that instead incorporating catastrophic coverage into the auto re-enrollment hierarchy in regulation at § 155.335(j) creates stronger authority for Exchanges to auto re-enroll catastrophic enrollees and provides better transparency for our auto re-enrollment operations in the Exchanges on the Federal platform. Many public comments agreed that this policy would achieve these effects.

We considered taking no action regarding amendments to § 155.400(e)(2) to codify that the flexibility for issuers experiencing billing or enrollment problems due to high volume or technical errors is not limited to extensions of the binder payment. However, we believe it is important to clarify for interested parties that HHS may provide enforcement discretion for other premium payment requirements.

We considered taking no action related to amendments to § 155.420(d)(16), to revise the parameters around the availability of a SEP that grants APTC-eligible qualified individuals with a projected household income at or below 150 percent of the FPL. However, HHS believes that many consumers will benefit from having additional opportunities to enroll in low-cost Exchange coverage, and that those who will be eligible for this special enrollment period and who do not enroll during the annual open enrollment period are likely to have been unaware of their option to enroll in a plan with no monthly premium through the Exchange, after application of APTC.

We considered taking no action regarding modifications to § 155.430(b)(1)(iv) to permit enrollees in Exchanges on the Federal Platform to retroactively terminate coverage back to the date in which they retroactively enroll in Medicare Parts A and B (including enrollment in Parts A and B through a Medicare Advantage plan), but no earlier than (a) the day before the first day of coverage under Medicare Parts A or B, and (b) the day that is 6 months before retroactive termination of QHP coverage is requested. However, we believe it is important to allow enrollees to retroactively terminate coverage when they were unable to do so prospectively due to retroactive enrollment in Medicare coverage. We considered whether to also permit Exchange enrollees to retroactively terminate coverage back to the date in which they enrolled in Medicaid, CHIP, or BHP coverage retroactively, but we determined that this would not be appropriate due to the increased risk that claims reversed by QHP issuers would not be covered by providers under these programs.

For standardized plan options (§ 156.201), we considered a range of proposals, such as modifying the methodology used to create the standardized plan options for PY 2025. Specifically, we considered lowering the deductibles in these plan designs and offsetting this increase in plan generosity by increasing cost sharing amounts for several benefit categories. We also considered simultaneously maintaining the current cost-sharing structures and decreasing the deductibles for these plan designs, which would increase the AVs of these plans to the ceiling of each AV *de minimis* range. Ultimately, we decided to finalize maintaining the AVs of these plans near the floor of each *de minimis* range by largely maintaining the cost sharing structures and deductible values from the standardized plan options from PY 2024, as well as by increasing the maximum out-of-pocket limits and, to a lesser degree, the deductible values for these plan designs. We believe this finalized approach strikes the greatest balance in providing enhanced pre-deductible coverage while ensuring competitive premiums for these standardized plan options.

For non-standardized plan option limits (§ 156.202), we considered a range of proposals. Specifically, for PY 2025 and subsequent years, we considered maintaining the PY 2024 limit of four non-standardized plan options per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area. We also considered not proposing an exceptions process that would allow issuers to offer non-standardized plan options exceeding the limit of two that we previously finalized for PY 2025 and subsequent years. We also considered basing this exceptions process on a range of other factors, including the degree of plan proliferation in a given service area (as determined by the number of plan offerings per consumer or issuer), whether a plan has a sufficiently differentiated network, and whether a plan has a sufficiently differentiated formulary. We also considered permitting issuers to request to offer an indefinite number of additional non-standardized plan option per product network type, metal level, and service area, as opposed to one exception per chronic and high-cost condition (as in the finalized policy). We also considered permitting exceptions only for an exclusive list of chronic and high-cost conditions, as opposed to any condition that is chronic and high-cost in nature (as described in the finalized policy).

However, we ultimately decided to finalize an exceptions process that will allow an issuer to offer additional non-standardized plan options for each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area if it demonstrates that these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent

lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area, in accordance with § 156.202(d) through (e). This policy is discussed in greater detail in section III.E.7 of the preamble to this rule.

We are finalizing this approach primarily because we believe that allowing exceptions to the non-standardized plan option limit of two could play an important role in enhancing the quality of life for those affected by these conditions, combatting health disparities, advancing health equity, and reducing health care expenditures. We further believe that introducing this exceptions process will balance the dual aims of reducing the risk of plan choice overload while simultaneously ensuring that issuers can continue to offer truly innovative plan designs that may benefit consumers with chronic and high-cost conditions.

E. Regulatory Flexibility Act (RFA)

The RFA requires agencies to analyze options for regulatory relief of small entities, if a rule has a significant impact on a substantial number of small entities. For purposes of the RFA, we estimate that small businesses, nonprofit organizations, and small governmental jurisdictions are small entities as that term is used in the RFA. The great majority of hospitals and most other health care providers and suppliers are small entities, either by being nonprofit organizations or by meeting the SBA definition of a small business (having revenues of less than $8.0 million to $41.5 million in any 1 year). We do not anticipate that providers will be directly impacted by the provisions in this final rule. Individuals and States are not included in the definition of a small entity. The provisions in this final rule will affect issuers, agents, brokers, web-brokers, and DE entities.

For purposes of the RFA, we believe that health insurance issuers [361] and DE entities [362] will be classified under the North American Industry Classification System (NAICS) code 524114 (Direct Health and Medical Insurance Carriers). According to SBA size standards, entities with average annual receipts of $47 million or less will be considered small entities for these NAICS codes. Issuers could possibly be classified in 621491 (HMO Medical Centers) and, if this is the case, the SBA size standard will be $44.5 million or less.[363] We believe that few, if any, insurance companies underwriting comprehensive health insurance policies (in contrast, for example, to travel insurance policies or dental discount policies) fall below these size thresholds. Based on data from MLR annual report submissions for the 2021 MLR reporting year, approximately 87 out of 483 issuers of health insurance coverage nationwide had total premium revenue of $47 million or less.[364] This estimate may overstate the actual number of small health insurance issuers that may be affected, since over 77 percent of these small issuers belong to larger holding groups, and many, if not all, of these small companies are likely to have non-health lines of business that will result in their revenues exceeding $47 million. Therefore, although it is likely that fewer than 87 issuers are considered small entities, for the purposes of this analysis, we assume 87 small issuers and/or DE entities would be impacted by this final rule.

We further believe that agents, brokers, and web-brokers [365] will be classified under NAICS code 524210 (Insurance Agencies and Brokerages). According to SBA size standards, entities with average annual receipts of $15 million or less will be considered small entities for these NAICS codes. Therefore, based on SBA data and for purposes of this analysis, we assume 122,547 agents, brokers, and web-brokers are small entities. However, the policies impacting agents, brokers, and web-brokers finalized in this rule will only impact such entities in States with State Exchanges that host web-broker programs. Currently, no States with State Exchanges host web-broker programs, but we estimate 5 States could opt to host a web-broker program for their State Exchange in the future. We further estimate that 20 web-brokers could operate in those States in the future and sought comment on this estimate.

The finalized policies that will result in an increased burden to small entities are described below.

We proposed to require issuers of risk adjustment covered plans to complete, implement, and provide to HHS written documentation of any corrective action plans when required by HHS if a high-cost risk pool audit results in the inclusion of certain observations in the final audit report. The annual burden per issuer associated with this policy is $627. For more details, please refer to the Regulatory Impact Analysis section associated with this policy in this final rule.

We proposed to apply to agents, brokers, and web-brokers operating in State Exchanges that operate their own eligibility and enrollment platform, and consequently in State Exchanges, in both the Individual Market Exchanges and SHOPs, certain existing HHS standards regarding web-brokers assisting consumers with enrolling in QHPs and applying for APTC/CSRs. The one-time burden per agent, broker, or web-broker associated with this policy is $43,019. For more details, please refer to the information collection requirements section associated with this policy in this final rule.

We proposed to require that DE entities implement and prominently display website changes in a manner that is consistent with display changes made by HHS to *HealthCare.gov* by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. The annual burden associated with this policy is $2,608 ($2,401 to comply with the requirements and $207 to make a request to deviate from the requirements). For more details, please refer to the information collection requirements section associated with this policy in this final rule.

We proposed to apply to DE entities operating in State Exchanges that operate their own eligibility and enrollment platform, and consequently State Exchanges that utilize DE entities, certain existing HHS standards regarding DE entities assisting consumers with enrolling in QHPs and applying for APTC/CSRs, in both the Individual Market Exchanges and SHOPs. The one-time burden per DE entity associated with this policy is $100,715.60. For more details, please refer to the information collection requirements section associated with this policy in this final rule.

We also proposed to require State Exchange and SBE–FP issuers to gather

[361] This includes health insurance issuers that act as DE entities pursuant to the definition in § 155.20.

[362] DE entities are entities that an Exchange permits to assist consumers with direct enrollment in qualified health plans offered through the Exchange in a manner considered to be through the Exchange as authorized by § 155.220(c)(3), § 155.221, or § 156.1230.

[363] *https://www.sba.gov/document/support-table-size-standards.*

[364] *https://www.cms.gov/CCIIO/Resources/Data-Resources/mlr.html.*

[365] This includes web-brokers that act as DE entities in accordance with the definition under § 155.20 to assist consumers with direct enrollment in qualified health plans offered through the Exchange in a manner considered to be through the Exchange as authorized by § 155.220(c)(3), § 155.221, or § 156.1230.

and submit network adequacy data, including time and distance data and telehealth data. The annual burden per issuer associated with this policy is $689. For more details, please refer to the information collection requirements section associated with this policy in this final rule.

Finally, we finalized § 156.202(d) through (e) to permit each issuer to offer additional non-standardized plan options for each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area if it demonstrates that these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area. The annual burden per issuer associated with this policy is $1,904. For more details, please refer to the information collection requirements section associated with this policy in this final rule.

Thus, the per-entity estimated annual cost for small issuers and/or DE entities is $5,828, and the total estimated annual cost for small issuers and/or DE entities is $507,036. The per-entity estimated one-time cost for small issuers and/or DE entities is $100,716, and the total estimated one-time cost for small issuers and/or DE entities is $8,762,257. The per-entity estimated one-time cost for small agents, brokers, and web-brokers is $43,019, and the total estimated one-time cost for small agents, brokers, and web-brokers is $860,380. There is no estimated annual cost for small agents, brokers, and web-brokers. See Tables 18, 19, 20, and 21.

TABLE 18—DETAILED ANNUAL COSTS FOR SMALL ENTITIES

Description of cost	Annual cost per small issuer and/or DE entity
Risk adjustment audit	$627
Applying *HealthCare.gov* display changes	2,608
Network adequacy	689
Non-standardized plan option limit exceptions	1,904
Total	$5,828

TABLE 19—AGGREGATE ANNUAL COSTS FOR SMALL ENTITIES

Affected entity	Affected small entities	Annual cost per entity	Aggregate annual cost for small entities
Issuers and/or DE entities	87	$5,828	$507,036

TABLE 20—ONE-TIME COSTS FOR SMALL ENTITIES

Description of cost	One-time cost per small issuer/DE entity	One-time cost per small agent, broker, or web-broker
Applying HHS standards to State Exchange entities	$100,716	$43,019
Total	100,716	43,019

TABLE 21—AGGREGATE ONE-TIME COSTS FOR SMALL ENTITIES

Affected entity	Affected small entities	One-time cost per entity	Aggregate one-time cost for small entities
Issuers and/or DE entities	87	$100,716	$8,762,257
Agents, brokers, and web-brokers	20	43,019	860,380

The annual cost per small issuer and/or DE entity of $5,828 is approximately 0.32 percent of the average annual receipts per small issuer. We anticipate that small issuers could pass on these increased costs to consumers in the form of higher premiums, resulting in an increase in receipts commensurate with the increase in costs. However, because the proportion of cost to receipts is so small, we anticipate this would have a *de minimis* impact on premiums, if any impact at all. We sought comment on this assumption.

We sought comment on this analysis and seek information on the number of small issuers, agents, brokers, web-brokers, or DE entities that may be affected by the provisions in these final rules.

As its measure of significant economic impact on a substantial number of small entities, HHS uses a change in revenue of more than 3 to 5 percent. We do not believe that this threshold will be reached by the requirements in this final rule, given that the annual per-entity cost of $5,828 per small issuer represents approximately 0.32 percent of the average annual receipts for a small issuer,[366] and there is no annual per-entity cost per small agent, broker, or web-broker. Therefore, the Secretary has certified that this final rule will not have a significant economic impact on a substantial number of small entities.

In addition, section 1102(b) of the Act requires us to prepare a regulatory

[366] United States Census Bureau (March 2020). *2017 SUSB Annual Data Tables by Establishment Industry, Data by Enterprise Receipt Size. https://www.census.gov/data/tables/2020/econ/susb/2020-susb-annual.html.*

impact analysis if a rule may have a significant impact on the operations of a substantial number of small rural hospitals. This analysis must conform to the provisions of section 604 of the RFA. For the purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital that is located outside of a metropolitan statistical area and has fewer than 100 beds. While this rule is not subject to section 1102 of the Act, we have determined that this rule will not affect small rural hospitals. Therefore, the Secretary has certified that this final rule will not have a significant impact on the operations of a substantial number of small rural hospitals.

F. Unfunded Mandates Reform Act (UMRA)

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA) also requires that agencies assess anticipated costs and benefits before issuing any rule whose mandates require spending in any 1 year of $100 million in 1995 dollars, updated annually for inflation. In 2024, that threshold is approximately $183 million. Although we have not been able to quantify all costs, we expect that the combined impact on State, local, or Tribal governments and the private sector does not meet the UMRA definition of unfunded mandate.

G. Federalism

Executive Order 13132 establishes certain requirements that an agency must meet when it issues a proposed rule (and subsequent final rule) that imposes substantial direct requirement costs on State and local governments, preempts State law, or otherwise has Federalism implications.

In compliance with the requirement of E.O. 13132 that agencies examine closely any policies that may have Federalism implications or limit the policy making discretion of the States, we have engaged in efforts to consult with and work cooperatively with affected States, including participating in conference calls with and attending conferences of the NAIC, and consulting with State insurance officials on an individual basis.

While developing this rule, we attempted to balance the States' interests in regulating health insurance issuers with the need to ensure market stability. By doing so, we complied with the requirements of E.O. 13132.

Because States have flexibility in designing their Exchange and Exchange-related programs, State decisions will ultimately influence both administrative expenses and overall premiums. States are not required to establish an Exchange or risk adjustment program. For States that elected previously to operate an Exchange, those States had the opportunity to use funds under Exchange Planning and Establishment Grants to fund the development of data. Accordingly, some of the initial cost of creating programs was funded by Exchange Planning and Establishment Grants. After establishment, Exchanges must be financially self-sustaining, with revenue sources at the discretion of the State. Current State Exchanges charge user fees to issuers.

This rule may have Federalism implications due to potential direct effects on the distribution of power and responsibilities among the State and Federal Governments relating to determining standards relating to health insurance that is offered in the individual and small group (including merged) markets. For example, we are finalizing the addition of requirements by which a State seeking to transition to a State Exchange provides the public with a notice and copy of its State Exchange Blueprint application. We are further finalizing the requirement that a State, within 3 months of submitting its State Exchange Blueprint to HHS for approval, conduct at least one public hearing whereby interested parties can learn about the State's intent to transition, as well as a State's progress toward transitioning, and conduct regular hearings every 3 months until the transition is complete. However, the Federalism implications of this policy may be mitigated because States have the option to establish their own Exchange, and we do not anticipate any additional burden on States because of this policy.

We believe that the finalized revisions to § 155.220(h) do not have Federalism implications as the CMS Administrator's review of agent, broker, and web-broker requests for reconsideration of administrative decisions is not based on State law, nor does it prevent a State from taking other legal actions under State law against an entity whose Exchange agreement(s) are terminated for cause by HHS.

The finalized revisions to §§ 155.220 and 155.221 applying certain web-broker and DE entity standards to State Exchanges that operate their own eligibility and enrollment platform may have Federalism implications, but they are substantially mitigated by allowing State Exchanges to leverage the oversight framework established by HHS for Exchanges that utilize the Federal Platform to evaluate web-broker and DE entity operational readiness to participate in an Exchange. We expect State Exchanges will be able to leverage audits conducted for the FFEs and SBE–FPs, as well as disclaimer language developed by HHS, while State operational costs would include any State-specific requirements or language to be added at the States' discretion. We believe that providing State Exchanges the opportunity to leverage the FFEs' oversight framework will likely reduce costs to State Exchanges as compared to the costs associated with State Exchanges establishing an independent framework for oversight and web-broker or DE entity approval independent of the FFEs.

The finalized revisions to § 155.315(e) may have Federalism implications due to our policy to use existing requirements and flexibilities under § 155.315(e) permitting all Exchanges to accept consumer attestation of incarceration status without further electronic verification. However, Exchanges that wish to continue electronically verifying an individual's incarceration status will be permitted do so, if HHS determines their data source is current, accurate, and minimizes administrative costs and burdens.

In addition, this final rule may have Federalism implications due to the finalized revisions pertaining to State selection of EHB-benchmark plans. The existing requirements pertaining to State selection of EHB-benchmark plans at § 156.111 already imposed Federalism implications on States that choose to change or revise their EHB-benchmark plans. As discussed elsewhere in this final rule, we understand that certain aspects of the current process to change or revise EHB-benchmark plans may impose unanticipated difficulty on and create confusion for States. Accordingly, the finalized revisions to § 156.111 are intended to reduce State burden and confusion to change or revise EHB-benchmark plans. As a result, the finalized revisions to § 156.111 may reduce the existing Federalism implications.

Our finalized amendments to § 155.320 adding new paragraph (c)(1)(iii) may have Federalism implications for States given that State Exchanges and State Medicaid agencies will pay fees for use of the VCI Hub service. However, the Federalism implications may be mitigated because use of the VCI Hub service is optional such that State Exchanges and State Medicaid agencies continue to have flexibility under § 155.315(h) and § 155.320(c)(3)(iv) to use other data sources, like State wage data, when income is not verified using IRS tax data or SSA Title II data.

Our finalized amendments to § 155.420(d)(16) may have Federalism implications; however, by maintaining the 150 percent FPL SEP to be available at the option of the Exchange, these implications may be mitigated because we allow State Exchanges to decide whether to implement it based on their specific market dynamics, needs, and priorities.

Comment: One commenter disagreed with the assessment in the Federalism section of this rule that there would be no additional burden on States, stating that the network adequacy provisions would place additional burdens on some States because some State departments of insurance conduct network adequacy assessments on behalf of the SBE. They asserted that, if the proposal is finalized, some State departments of insurance would need to contract for additional network adequacy assessments, or possibly increase personnel at significant cost to the State. Furthermore, the commenter disagreed with the conclusion in the Regulatory Flexibility Act section of this rule that the rule would not have a significant impact on the operations of a substantial number of small rural hospitals. The commenter stated that if exchange plans become unavailable in rural counties to the same extent that Medicare Advantage plans are unavailable, then some States' rural hospitals will be threatened with significant revenue losses.

Response: We note that the Federalism and Regulatory Flexibility Act sections of this final rule have been revised with an updated assessment of the implications of this final rule for Federalism, and the impact on small entities. The concerns that commenters raised regarding Federalism and the Regulatory Flexibility Act are addressed in those updated sections.

H. Congressional Review Act

Pursuant to Subtitle E of the Small Business Regulatory Enforcement Fairness Act of 1996 (also known as the Congressional Review Act, 5 U.S.C 801 *et seq.*) OIRA has determined that this rule does meet the criteria set forth in 5 U.S.C. 804(2). Accordingly, this rule has been submitted to each House of the Congress and to the Comptroller General a report containing a copy of the rule along with other specified information.

Chiquita Brooks-LaSure, Administrator of the Centers for Medicare & Medicaid Services, approved this document on March 27, 2024.

List of Subjects

31 CFR Part 33

Health care, Health insurance, and Reporting and recordkeeping requirements.

42 CFR Part 600

Administrative practice and procedure, Health care, health insurance, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements.

45 CFR Part 153

Administrative practice and procedure, Health care, Health insurance, Health records, Intergovernmental relations, Organization and functions (Government agencies), Reporting and recordkeeping requirements.

45 CFR Part 155

Administrative practice and procedure, Advertising, Brokers, Conflict of interests, Consumer protection, Grants administration, Grant programs-health, Health care, Health insurance, Health maintenance organizations (HMO), Health records, Hospitals, Indians, Individuals with disabilities, Intergovernmental relations, Loan programs-health, Medicaid, Organization and functions (Government agencies), Public assistance programs, Reporting and recordkeeping requirements, Technical assistance, Women and youth.

45 CFR Part 156

Administrative practice and procedure, Advertising, Advisory committees, Brokers, Conflict of interests, Consumer protection, Grant programs-health, Grants administration, Health care, Health insurance, Health maintenance organization (HMO), Health records, Hospitals, Indians, Individuals with disabilities, Loan programs-health, Medicaid, Organization and functions (Government agencies), Public assistance programs, Reporting and recordkeeping requirements, State and local governments, Sunshine Act, Technical assistance, Women, and Youth.

Department of the Treasury

For the reasons set forth in the preamble, the Department of the Treasury amends 31 CFR subtitle A, part 33, as set forth below:

PART 33—WAIVERS FOR STATE INNOVATION

■ 1. The authority citation for part 33 continues to read as follows:

Authority: Sec. 1332, Pub. L. 111–148, 124 Stat. 119.

■ 2. Section 33.112 is amended by adding paragraph (c)(3) to read as follows:

§ 33.112 State public notice requirements.

* * * * *

(c) * * *

(3) Such public hearings shall be conducted in an in-person, virtual (that is, one that uses telephonic, digital, and/or web-based platforms), or hybrid (that is, one that provides for both in-person and virtual attendance) format.

* * * * *

■ 3. Section 33.120 is amended by revising paragraph (c) introductory text to read as follows:

§ 33.120 Monitoring and compliance.

* * * * *

(c) *Post award.* Within at least 6 months after the implementation date of a section 1332 waiver and annually thereafter, a State must hold a public forum to solicit comments on the progress of a section 1332 waiver. The State must hold the public forum at which members of the public have an opportunity to provide comments and must provide a summary of the forum to the Secretary as part of the quarterly report specified in § 33.124(a) that is associated with the quarter in which the forum was held, as well as in the annual report specified in § 33.124(b) that is associated with the year in which the forum was held. The public forum shall be conducted in an in-person, virtual (that is, one that uses telephonic, digital, and/or web-based platforms), or hybrid (that is, one that provides for both in-person and virtual attendance) format.

* * * * *

Department of Health and Human Services

For the reasons set forth in the preamble, under the authority at 5 U.S.C. 301, the Department of Health and Human Services amends 42 CFR chapter IV, subchapter I, and 45 CFR subtitle A, subchapter B, as set forth below.

42 CFR Chapter IV, Subchapter I

PART 600—ADMINISTRATION, ELIGIBILITY, ESSENTIAL HEALTH BENEFITS, PERFORMANCE STANDARDS, SERVICE DELIVERY REQUIREMENTS, PREMIUM AND COST SHARING, ALLOTMENTS, AND RECONCILIATION

■ 4. The authority citation for part 600 continues to read as follows:

Authority: Section 1331 of the Patient Protection and Affordable Care Act of 2010 (Pub. L. 111–148, 124 Stat. 119), as amended by the Health Care and Education Reconciliation Act of 2010 (Pub. L. 111–152, 124 Stat. 1029).

■ 5. Section 600.320 is amended by revising paragraph (c) to read as follows:

§ 600.320 Determination of eligibility for and enrollment in a standard health plan.

* * * * *

(c) *Effective date of eligibility.* The State must establish a uniform method of determining the effective date of eligibility for enrollment in a standard health plan which—

(1) Follows the Exchange effective date standards at 45 CFR 155.420(b)(1);

(2) Follows the Medicaid effective date standards at § 435.915 of this chapter exclusive of § 435.915(a);or

(3) Follows an effective date of eligibility of the first day of the month following the month in which BHP eligibility is determined; or

(4) Follows an effective date of eligibility standard established by the State and subject to HHS approval to ensure that the effective date is:

(i) No later than the first day of the second month following the date that an individual has been determined BHP-eligible; and

(ii) No more restrictive than paragraphs (c)(1) through (3) of this section.

* * * * *

45 CFR Subtitle A, Subchapter B

PART 153—STANDARDS RELATED TO REINSURANCE, RISK CORRIDORS, AND HHS RISK ADJUSTMENT UNDER THE AFFORDABLE CARE ACT

■ 6. The authority citation for part 153 continues to read as follows:

Authority: 42 U.S.C. 18031, 18041, and 18061 through 18063.

■ 7. The heading for part 153 is revised to read as set forth above.

■ 8. Section 153.620 is amended by revising the section heading and paragraph (c)(4) introductory text to read as follows:

§ 153.620 Compliance with HHS risk adjustment standards.

* * * * *

(c) * * *

(4) *Final audit findings.* If an audit results in the inclusion of a finding or observation in the final audit report, the issuer must comply with the actions set forth in the final audit report in the manner and timeframe established by HHS, and the issuer must complete all of the following, if required by HHS:

* * * * *

PART 155—EXCHANGE ESTABLISHMENT STANDARDS AND OTHER RELATED STANDARDS UNDER THE AFFORDABLE CARE ACT

■ 9. The authority citation for part 155 continues to read as follows:

Authority: 42 U.S.C. 18021–18024, 18031–18033, 18041–18042, 18051, 18054, 18071, and 18081–18083.

■ 10. Section 155.105 is amended—

■ a. In paragraph (b)(2) by removing ''and'' after the semicolon;

■ b. In paragraph (b)(3) by removing the period at the end and adding in its place ''; and''; and

■ c. Adding paragraph (b)(4).

The addition reads as follows:

§ 155.105 Approval of a State Exchange.

* * * * *

(b) * * *

(4) The Exchange first operates a State Exchange on the Federal platform under § 155.106(c), meeting all requirements established under § 155.200(f), for at least one plan year, including its first open enrollment period.

* * * * *

■ 11. Section 155.106 is amended by revising paragraph (a)(2) to read as follows:

§ 155.106 Election to operate an Exchange after 2014.

(a) * * *

(2) Submit an Exchange Blueprint application for HHS approval at least 15 months prior to the date on which the Exchange proposes to begin open enrollment as a State Exchange. HHS requires that a State submitting a Blueprint Application to operate a State Exchange provide, upon request, supplemental information to HHS detailing the State's implementation of its State Exchange functionality, including information on the ability to implement and comply with Federal requirements for operating an Exchange.

(i) *Public notice.* Upon submission of an Exchange Blueprint application to operate a State Exchange, the State shall issue a public notice of its Exchange Blueprint application submission through its website and include a copy of the Exchange Blueprint application, a description of the Plan Year for which the State seeks to transition to a State Exchange, language indicating that the State is seeking approval from HHS to transition to a State Exchange, and information about when and where the State will conduct public engagements regarding the State's Exchange Blueprint application, as described in paragraph (a)(2)(ii) of this section.

(ii) *Public engagements.* After a State issues its public notice as described in paragraph (a)(2)(i) of this section and until HHS approves, or conditionally approves, the State's Exchange Blueprint application, a State must conduct at least one public engagement (such as a townhall meeting or public hearing) either in-person or virtually, regarding the State's Exchange Blueprint application progress, in a timeline and manner considered effective by the State and with HHS' concurrence. A State shall provide public notice of the public engagement. Such public engagement shall also provide interested parties the opportunity to learn about the State's progress in transitioning to a State Exchange and offer input on that transition. Following the initial public engagement described in this paragraph and until HHS approves or conditionally approves the State Exchange Blueprint application, a State shall conduct periodic public engagements, either in-person or virtually, in a timeframe and manner considered effective by the State.

* * * * *

■ 12. Section 155.170 is amended by revising paragraph (a)(2) to read as follows:

§ 155.170 Additional required benefits.

(a) * * *

(2) A benefit required by State action taking place on or before December 31, 2011, a benefit required by State action for purposes of compliance with Federal requirements, or a benefit covered in the State's EHB-benchmark plan is considered an EHB. A benefit required by State action taking place on or after January 1, 2012, other than for purposes of compliance with Federal requirements, that is not a benefit covered in the State's EHB-benchmark plan is considered in addition to the essential health benefits.

* * * * *

■ 13. Section 155.205 is amended by revising paragraphs (a) and (b)(4) and (5) to read as follows:

§ 155.205 Consumer assistance tools and programs of an Exchange.

(a) *Call center.* If the Exchange is not an Exchange described in paragraph (a)(1) or (2) of this section, the Exchange must provide for operation of a toll-free call center that addresses the needs of consumers requesting assistance and meets the requirements outlined in paragraphs (c)(1), (c)(2)(i), and (c)(3) of this section and at § 155.405(c)(2)(ii). At a minimum, the Exchange call center must provide consumers with access to a live call center representative during an Exchange's published hours of operation and a live call center

representative who must be able to assist consumers with filing their Exchange application, including providing consumers with information on their eligibility for advance premium tax credits and cost-sharing reductions, facilitating a consumer's comparison of QHPs, and helping consumers complete their Exchange applications for submission to the Exchange. If the Exchange is an Exchange described in paragraph (a)(1) or (2) of this section, the Exchange must provide at a minimum a toll-free telephone hotline that includes the capability to provide information to consumers about eligibility and enrollment processes, and to appropriately direct consumers to the applicable Exchange website and other applicable resources.

* * * * *

(b) * * *

(4) Allows for an individual to submit a single streamlined eligibility application to the Exchange in accordance with § 155.405 and for the Exchange to make all determinations of eligibility for enrollment in a QHP and insurance affordability programs, in accordance with subpart D of this part, through the operation of a centralized eligibility and enrollment platform on the Exchange's website; or, if the Exchange is a State-based Exchange on the Federal platform, through the Federal eligibility and enrollment platform.

(5) Allows a qualified individual to select a QHP and allows the Exchange to maintain records of all QHP enrollments, in accordance with subpart E of this part, through the operation of a centralized eligibility and enrollment platform on the Exchange's website; or, if the Exchange is a State-based Exchange on the Federal platform, through the Federal eligibility and enrollment platform.

* * * * *

■ 14. Section 155.220 is amended by adding paragraph (c)(4)(iii), revising paragraphs (h)(2) and (3), and adding paragraph (n) to read as follows:

§ 155.220 Ability of States to permit agents and brokers and web-brokers to assist qualified individuals, qualified employers, or qualified employees enrolling in QHPs.

* * * * *

(c) * * *

(4) * * *

(iii) Web-brokers operating in State Exchanges that do not use the Federal platform that permit other agents and brokers, through a contract or other arrangement, to use their internet website to help an applicant or enrollee complete a QHP selection or complete the Exchange eligibility application must comply with the standards in paragraphs (c)(4)(i)(A), (B), (D) and (F) of this section, except that all references to ''Federally-facilitated Exchange'' or ''HHS'' in paragraphs (c)(4)(i)(A), (B), (D), and (F) will be understood to mean ''the applicable State Exchange.''

* * * * *

(h) * * *

(2) *Timeframe for request.* The agent, broker, or web-broker must submit a request for reconsideration to the CMS Administrator within 30 calendar days of the written notice from HHS.

(3) *Notice of reconsideration decision.* The CMS Administrator will provide the agent, broker, or web-broker with a written notice of the reconsideration decision within 60 calendar days of the date the CMS Administrator receives the request for reconsideration. This decision will constitute HHS' final determination.

* * * * *

(n) *Application to State Exchanges that do not use the Federal platform.* A web-broker that assists or enrolls qualified individuals, qualified employers or qualified employees in coverage in a manner that constitutes enrollment through the State Exchange, or assists individual market consumers with submission of applications for advance payments of the premium tax credit and cost-sharing reductions through the State Exchange, must comply with the Federally-facilitated Exchange standards in paragraphs (c)(3)(i)(A), (G), (I), and (j)(2)(i) of this section, including any additional State-specific standards under paragraph (n)(1) of this section, and the State Exchange's operational readiness standards under paragraph (n)(2) of this section. For the purposes of paragraph (j)(2)(i) of this section, references to ''HHS'' and ''the federally facilitated Exchanges'' will be understood to mean ''the applicable State Exchange, applied for web-brokers'', and the reference to ''*HealthCare.gov*'' will be understood to mean ''the State Exchange website, applied for web-brokers.''

(1) State Exchanges may add State-specific information to the standardized disclaimers and information under paragraphs (c)(3)(i)(A), (G), and (I) of this section that does not conflict with the HHS-provided language.

(2) State Exchanges must establish the form and manner for their web-brokers to demonstrate operational readiness and compliance with applicable requirements in order for the web-broker's internet website being used to complete an Exchange eligibility application or a QHP selection, which may include submission or completion of the following items to the State Exchange, in the form and manner specified by the Exchange:

(i) Operational data including licensure information, points of contact and third-party relationships;

(ii) Enrollment testing, prior to approval or renewal;

(iii) website reviews performed by the State Exchange;

(iv) Security and privacy documentation, including:

(A) Penetration testing results;

(B) Security and privacy assessment reports;

(C) Vulnerability scan results;

(D) Plans of action and milestones; and

(E) System security and privacy plans.

(v) Agreements between the web-broker and the State Exchange.

■ 15. Section 155.221 is amended by revising paragraphs (a) introductory text and adding paragraphs (a)(1)(i) and (ii), (b)(6), and (j) to read as follows:

§ 155.221 Standards for direct enrollment entities and for third-parties to perform audits of direct enrollment entities.

(a) *Direct enrollment entities.* All Exchanges may permit the following entities to assist consumers with direct enrollment in QHPs offered through the Exchange in a manner that is considered to be through the Exchange, to the extent permitted by applicable State law:

(1) * * *

(i) For purposes of applying the requirements of § 156.1230(b) of this subchapter to State Exchanges, all references to ''Federally-facilitated Exchange'' and ''HHS'', and ''HealthCare.gov'' will be understood to mean ''the applicable State Exchange'', ''the applicable State Exchange'', and ''the applicable State Exchange website'', respectively.

(ii) [Reserved]

* * * * *

(b) * * *

(6) Implement and prominently display website changes in a manner that is consistent with display changes made to the Federally-facilitated Exchange website by meeting standards communicated and defined by HHS within a time period set by HHS, unless HHS approves a deviation from those standards. Direct enrollment entities may request a deviation by submitting a proposed alternative *display and* accompanying rationale to HHS for review.

* * * * *

(j) *Application to State* Exchanges *that do not use the Federal platform.* A direct enrollment entity that enrolls

qualified individuals, qualified employers, or qualified employees in coverage in a manner that constitutes enrollment through the State Exchange, or assists consumers with submission of applications for advance payments of the premium tax credit and cost-sharing reductions through the State Exchange, must comply with the Federally-facilitated Exchange standards in paragraphs (b)(1) through (3) and (d) of this section, including the exceptions in paragraph (c) of this section, where applicable; any additional State-specific standards under paragraph (j)(1) of this section; the State Exchange's operational readiness standards under paragraph (j)(2) of this section; and the State Exchange's website display change standards under paragraph (j)(3) of this section. References to §§ 155.415(b), and 155.415(b)(1) in paragraph (d) of this section will be understood to also apply to State Exchanges.

(1) State Exchanges may add State-specific information to the standardized disclaimer under paragraph (b)(2) of this section that does not conflict with the HHS-provided language.

(2) State Exchanges must establish the form and manner for their direct enrollment entities to demonstrate operational readiness and compliance with applicable requirements in order for the direct enrollment entity's internet website being used to complete an Exchange eligibility application or a QHP selection, which may include submission or completion of the following documentation to the State Exchange, in the form and manner specified by the Exchange:

(i) Business audit documentation including:

(A) Notices of intent to participate including auditor information;

(B) Documentation packages including privacy questionnaires, privacy policy statements, and terms of service; and

(C) Business audit reports including testing results.

(ii) Security and privacy audit documentation including:

(A) Interconnection security agreements;

(B) Security and privacy controls assessment test plans;

(C) Security and privacy assessment reports;

(D) Plans of action and milestones;

(E) Privacy impact assessments;

(F) System security and privacy plans;

(G) Incident response plans; and

(H) Vulnerability scan results.

(3) State Exchanges must require their direct enrollment entities to implement and prominently display website changes in a manner that is consistent with the display changes made by State Exchanges to the State Exchanges' websites, consistent with the process of defining and communicating standards and setting advance notice periods in paragraph (b)(6) of this section, except that all references in paragraph (b)(6) of this section to ''Federally-Facilitated Exchange website'' would be understood to mean ''State Exchange website,'' references to ''HHS'' would be understood to mean ''State Exchange,'' and the reference to ''unless HHS approves a deviation from those standards'' would be understood to mean ''unless the State Exchange approves a deviation from those standards under the deviation request process it is required to establish should the State Exchange elect to permit deviation requests.''

■ 16. Section 155.302 is amended by revising paragraph (a)(1) to read as follows:

§ 155.302 Options for conducting eligibility determinations.

(a) * * *

(1) Directly, through contracting arrangements in accordance with § 155.110(a) under which the Exchange carries out all eligibility determinations for QHP coverage and related insurance affordability programs; or, as a State-based Exchange on the Federal platform, through a Federal platform agreement under which HHS carries out eligibility determinations and other requirements contained within this subpart; or

* * * * *

■ 17. Section 155.305 is amended by adding paragraphs (f)(4)(i) and (ii) to read as follows:

§ 155.305 Eligibility standards.

* * * * *

(f) * * *

(4) * * *

(i) If HHS notifies the Exchange as part of the process described in § 155.320(c)(3) that APTC payments were made on behalf of either the tax filer or spouse, if the tax filer is a married couple, for 1 year for which tax data would be utilized for verification of household income and family size in accordance with § 155.320(c)(1)(i), and the tax filer or the tax filer's spouse did not comply with the requirement to file an income tax return for that year as required by 26 U.S.C. 6011, 6012, and their implementing regulations and reconcile APTC for that period (''file and reconcile''), the Exchange must:

(A) Send a notification to the tax filer, consistent with the standards applicable to the protection of Federal Tax Information, that informs the tax filer that the Exchange has determined that the tax filer or the tax filer's spouse, if the tax filer is married, has failed to file and reconcile, and educate the tax filer of the need to file and reconcile or risk being determined ineligible for APTC if they fail to file and reconcile for a second consecutive tax year; or

(B) Send a notification to either the tax filer or their enrollee, that informs the tax filer or enrollee that they may be at risk of being determined ineligible for APTC in the future. These notices must educate tax filers or their enrollees on the requirement to file and reconcile, while not directly stating that the IRS indicates the tax filer or the tax filer's spouse, if the tax filer is married, has failed to file and reconcile.

(ii) [Reserved]

* * * * *

■ 18. Section 155.315 is amended by revising paragraph (e) to read as follows:

§ 155.315 Verification process related to eligibility for enrollment in a QHP through the Exchange.

* * * * *

(e) *Verification of incarceration status.* The Exchange must verify an applicant's attestation that the applicant meets the requirements of § 155.305(a)(2) by—

(1) Accepting an applicant's attestation that they are not currently incarcerated; or

(2) Verifying an applicant's attestation of incarceration status using any electronic data source that is available to the Exchange and which has been approved by HHS for this purpose. HHS will approve an electronic data source for incarceration verification if it provides data that are current and accurate, and if its use minimizes administrative costs and burdens.

(3) If an Exchange verifies an applicant's attestation of incarceration status using an approved data source under paragraph (e)(2) of this section, to the extent that an applicant's attestation is not reasonably compatible with information from the approved data source or other information provided by the applicant or in the records of the Exchange, the Exchange must follow the procedures specified in § 155.315(f).

* * * * *

■ 19. Section 155.320 is amended by adding paragraph (c)(1)(iii) to read as follows.

§ 155.320 Verification process related to eligibility for insurance affordability programs.

* * * * *

(c) * * *

(1) * * *

(iii) *Payment to use income data through the Verify Current Income Hub*

service. Beginning July 1, 2024, State Exchanges that elect the option to access the Verify Current Income service through the Federal Data Services Hub (''the Hub'') to verify an individual's income as described in paragraph (c)(3)(vi)(A) of this section, must reimburse HHS for the costs of their access to and use of the income data provided by the Verify Current Income Hub service. HHS will invoice States monthly for the amount the State must pay to HHS based on their actual utilization of CSI income data from the prior month and this invoiced amount will equal the product of the number of purchased transactions returned from the Verify Current Income Hub service and the price per transaction established under the contract maintained by HHS to provide the VCI Hub service, as well as an administrative fee to account for any direct or indirect costs of making CSI income data accessed through the VCI Hub service available to State Exchanges and State Medicaid and CHIP agencies.

* * * * *

■ 20. Section 155.330 is amended by revising paragraph (d)(3) to read as follows:

§ 155.330 Eligibility redetermination during a benefit year.

* * * * *

(d) * * *

(3) *Definition of periodically.* (i) Beginning with the 2021 calendar year, the Exchange must perform the periodic examination of data sources described in paragraphs (d)(1)(ii) of this section at least twice in a calendar year. State Exchanges that have implemented a fully integrated eligibility system with their respective State Medicaid programs, that have a single eligibility rules engine that uses MAGI to determine eligibility for advance payments of the premium tax credit, cost-sharing reductions, Medicaid, CHIP, and the BHP, if a BHP is operating in the service area of the Exchange, will be deemed in compliance with the Medicaid/CHIP PDM requirements and, if applicable, BHP PDM requirements, in paragraphs (d)(1)(ii) and (d)(3) of this section.

(ii) Beginning with the 2025 calendar year, the Exchange must perform the periodic examination of data sources described in paragraph (d)(1)(i) of this section at least twice in a calendar year.

(iii) Notwithstanding the requirements of paragraphs (d)(3)(i) and (ii) of this section, the Secretary has authority to temporarily suspend the requirement that Exchanges conduct the PDM processes described at paragraph (d)(3)(i) or (ii) of this section during certain situations or circumstances that leads to the limited availability of data needed to conduct PDM or of documentation needed for an enrollee to notify the Exchange that the result of PDM is inaccurate as described in paragraph (e)(2)(i)(C) of this section.

* * * * *

■ 21. Section 155.335 is amended by—

■ a. Revising paragraphs (j)(1)(ii) through (iv);

■ b. Adding paragraph (j)(1)(v);

■ c. Revising paragraphs (j)(2)(i) through (iii); and

■ d. Adding paragraphs (j)(2)(iv) and (j)(5).

The revisions and additions read as follows:

§ 155.335 Annual eligibility redetermination.

* * * * *

(j) * * *

(1) * * *

(ii) If the enrollee's current QHP is not available through the Exchange, the Exchange will re-enroll the enrollee in a QHP within the same product at the same coverage level as described in sections 1302(d) or (e) of the ACA as the enrollee's current QHP that has the most similar network compared to the enrollee's current QHP;

(iii) If the enrollee's current QHP is not available through the Exchange and the enrollee's product no longer includes a QHP at the same coverage level as described in sections 1302(d) or (e) of the ACA as the enrollee's current QHP and—

(A) The enrollee's current QHP is a silver level plan, the Exchange will re-enroll the enrollee in a silver level QHP under a different product offered by the same QHP issuer that is most similar to the enrollee's current product and that has the most similar network compared to the enrollee's current QHP. If no such silver level QHP is available for enrollment through the Exchange, the Exchange will re-enroll the enrollee in a QHP under the same product that is coverage level higher or lower than the enrollee's current QHP and that has the most similar network compared to the enrollee's current QHP; or

(B) The enrollee's current QHP is not a silver level plan, the Exchange will re-enroll the enrollee in a QHP under the same product that is one coverage level higher or lower than the enrollee's current QHP and that has the most similar network compared to the enrollee's current QHP;

(iv) If the enrollee's current QHP is not available through the Exchange and the enrollee's product no longer includes a QHP that is at the same coverage level as described in sections 1302(d) or (e) of the ACA as, or one coverage level higher or lower than, the enrollee's current QHP, the Exchange will re-enroll the enrollee in any other QHP offered under the product in which the enrollee's current QHP is offered in which the enrollee is eligible to enroll and that has the most similar network compared to the enrollee's current QHP; or

(v) Notwithstanding the other provisions in this paragraph (j)(1), to the extent permitted by applicable State law, if the enrollee's current QHP is a catastrophic plan as described in section 1302(e) of the ACA, and the enrollee will no longer meet the criteria for enrollment in a catastrophic plan as described in section 1302(e)(2) of the ACA:

(A) The Exchange will re-enroll the enrollee in a bronze metal level QHP within the same product as the enrollee's current QHP that has the most similar network compared to the enrollee's current QHP; or

(B) If no bronze plan is available through this product, the Exchange will re-enroll the enrollee in the QHP with the lowest coverage level offered under the product in which the enrollee's current QHP is offered in which the enrollee is eligible to enroll and that has the most similar network compared to the enrollee's current QHP.

(2) * * *

(i) The Exchange will re-enroll the enrollee in a QHP at the same coverage level as the enrollee's current QHP in the product offered by the same issuer that is the most similar to the enrollee's current product and that has the most similar network compared to the enrollee's current QHP;

(ii) If the issuer does not offer another QHP at the same coverage level as the enrollee's current QHP, the Exchange will re-enroll the enrollee in a QHP that is one coverage level higher or lower than the enrollee's current QHP and that has the most similar network compared to the enrollee's current QHP in the product offered by the same issuer through the Exchange that is the most similar to the enrollee's current product;

(iii) If the issuer does not offer another QHP through the Exchange at the same coverage level as, or one metal level higher or lower than the enrollee's current QHP, the Exchange will re-enroll the enrollee in any other QHP offered by the same issuer in which the enrollee is eligible to enroll and that has the most similar network compared to the enrollee's current QHP in the product that is most similar to the enrollee's current product; or

(iv) Notwithstanding the other provisions in this paragraph (j)(2), to the

extent permitted by applicable State law, if the enrollee's current QHP is a catastrophic plan as described in section 1302(e) of the ACA, and the enrollee will no longer meet the criteria for enrollment in a catastrophic plan as described in section 1302(e)(2) of the ACA:

(A) The Exchange will re-enroll the enrollee in a bronze metal level QHP offered by the same issuer in which the enrollee is eligible to enroll and that has the most similar network compared to the enrollee's current QHP in the product that is most similar to the enrollee's current product; or

(B) If no bronze plan is available through this product, the Exchange will re-enroll the enrollee in the QHP with the lowest coverage level offered under the product in which the enrollee's current QHP is offered in which the enrollee is eligible to enroll and that has the most similar network compared to the enrollee's current QHP.

* * * * *

(5) For purposes of this section, catastrophic coverage is not a coverage level that is considered higher or lower than metal level coverage when re-enrolling an enrollee to a plan that is a metal level higher or lower than their current plan, and an Exchange may not re-enroll an enrollee that has coverage under section 1302(d) into catastrophic coverage.

* * * * *

■ 22. Section 155.400 is amended by revising paragraph (e)(2) to read as follows:

§ 155.400 Enrollment of qualified individuals into QHPs.

* * * * *

(e) * * *

(2) *Premium payment deadline extension.* Exchanges may, and the Federally-facilitated Exchanges and State-based Exchanges on the Federal platform will, allow issuers experiencing billing or enrollment problems due to high volume or technical errors, or issuers directed to do so by applicable State or Federal authorities, to implement a reasonable extension of the binder payment and other premium payment deadlines.

* * * * *

■ 23. Section 155.410 is amended by revising paragraph (e)(4)(i) and (ii) and adding paragraph (e)(4)(iii) to read as follows:

§ 155.410 Initial and annual open enrollment periods.

* * * * *

(e) * * *

(4) * * *

(i) Subject to paragraphs (e)(4)(ii) and (iii) of this section, the annual open enrollment period begins on November 1 of the calendar year preceding the benefit year and extends through January 15 of the benefit year.

(ii) For State Exchanges, for the benefit years beginning on or after January 1, 2025, a later annual open enrollment period end date may be adopted, such that the open enrollment period begins on November 1 of the calendar year preceding the benefit year and ends after January 15 of the benefit year.

(iii) For any State Exchange with an annual open enrollment period that began before November 1, 2023, and ended before January 15, 2024, for the 2024 benefit year, that State Exchange may continue to begin open enrollment before November 1 for consecutive future benefit years, so long as the open enrollment period continues uninterrupted for at least 11 weeks. If such State Exchange changes the date(s) of their annual open enrollment period, it must comply with paragraphs (e)(4)(i) and (ii) for all future annual open enrollment periods.

* * * * *

■ 24. Section 155.420 is amended by revising paragraphs (b)(1), (b)(3)(i), and (d)(16) to read as follows:

§ 155.420 Special enrollment periods.

* * * * *

(b) * * *

(1) *Regular effective dates.* Except as specified in paragraphs (b)(2) and (3) of this section, for a QHP selection received by the Exchange from a qualified individual, the Exchange must ensure a coverage effective date of the first day of the month following the QHP selection; except that before January 1, 2025, for a QHP selection received by the Exchange from a qualified individual between the sixteenth and the last day of any month, the Exchange may ensure a coverage effective date of the first day of the second month following QHP selection.

* * * * *

(3) * * *

(i) For a QHP selection received by the Exchange under a special enrollment period for which the effective dates of coverage specified in paragraph (b)(1) or (b)(2)(i) of this section would apply, the Exchange may provide a coverage effective date that is earlier than specified in such paragraph.

* * * * *

(d) * * *

(16) At the option of the Exchange, a qualified individual or enrollee, or the dependent of a qualified individual or enrollee, who is eligible for advance payments of the premium tax credit, and whose household income, as defined in 26 CFR 1.36B–1(e), is expected to be at or below 150 percent of the Federal poverty level, may enroll in a QHP or change from one QHP to another one time per month.

* * * * *

■ 25. Section 155.430 is amended by revising paragraph (b)(1)(iv) introductory text and adding paragraph (b)(1)(iv)(D) to read as follows:

§ 155.430 Termination of Exchange enrollment or coverage.

* * * * *

(b) * * *

(1) * * *

(iv) The Exchange must permit an enrollee to retroactively terminate or cancel the enrollee's coverage or enrollment in a QHP in the following circumstances:

* * * * *

(D) In a Federally-facilitated Exchange or a State-based Exchange on the Federal platform, if HHS elects to permit such terminations, and in a State Exchange that elects to permit such terminations, the enrollee demonstrates to the Exchange that the enrollee enrolled in Medicare Part A or B coverage with a retroactive effective date, and requests retroactive termination of QHP coverage within 60 days of the enrollment. The effective date of the retroactive termination must be no earlier than the later of the day before the first day of coverage under Medicare Part A or B, and the day that is six months before the retroactive termination in QHP coverage is requested. A retroactive termination date as described in this paragraph is not available for enrollments in stand-alone dental plans.

* * * * *

■ 26. Section 155.1050 is amended by revising paragraph (a) to read as follows:

§ 155.1050 Establishment of Exchange network adequacy standards.

(a) Except with regard to multi-State plans:

(1) A federally facilitated Exchange must ensure that the provider network of each QHP meets the standards specified in § 156.230 of this subtitle.

(2) State Exchanges and State-based Exchanges on the Federal Platform must ensure that the provider network of each QHP meets applicable standards specified in § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(4) of this sub*chapter.*

(i) For plan years beginning on or after January 1, 2026, to comply with the requirement under paragraph (a)(2) of

this section, State Exchanges and State-based Exchanges on the Federal platform must:

(A) Establish and impose network adequacy time and distance standards for QHPs that are at least as stringent as standards for QHPs participating on the Federally-facilitated Exchanges under § 156.230(a)(2)(i)(A) of this subchapter;

(B) Conduct, prior to QHP certification, quantitative network adequacy reviews to evaluate compliance with requirements under § 156.230(a)(1)(ii), (a)(1)(iii), and (a)(2)(i)(A) of this subchapter, while providing QHP certification applicants the flexibilities described under § 156.230(a)(2)(ii) and (a)(3) and (4); and

(C) Require that all issuers seeking certification of a plan as a QHP submit information to the Exchange reporting whether or not network providers offer telehealth services.

(ii) For plan years beginning on or after January 1, 2026, HHS may grant an exception to the requirements described under paragraphs (a)(2)(i) of this section to a State Exchange or State-based Exchange on the Federal platform that demonstrates with evidence-based data, in a form and manner specified by HHS, that:

(A) the Exchange applies and enforces alternate quantitative network adequacy standards that are reasonably calculated to ensure a level of access to providers that is as great as that ensured by the Federal network adequacy standards established for QHPs under § 156.230(a)(1)(iii), (a)(2)(i)(A), and (a)(4) of this subchapter; and

(B) the Exchange evaluates whether plans comply with applicable network adequacy standards prior to certifying any plan as a QHP.

* * * * *

■ 27. Section 155.1312 is amended by adding paragraph (c)(3) to read as follows:

§ 155.1312 State public notice requirements.

* * * * *

(c) * * *

(3) Such public hearings shall be conducted in an in-person, virtual (that is, one that uses telephonic, digital, and/or web-based platforms), or hybrid (that is, one that provides for both in-person and virtual attendance) format.

* * * * *

■ 28. Section 155.1320 is amended by revising paragraph (c) introductory text to read as follows:

§ 155.1320 Monitoring and compliance.

* * * * *

(c) *Post award.* Within at least 6 months after the implementation date of a section 1332 waiver and annually thereafter, a State must hold a public forum to solicit comments on the progress of a section 1332 waiver. The State must hold the public forum at which members of the public have an opportunity to provide comments and must provide a summary of the forum to the Secretary as part of the quarterly report specified in § 155.1324(a) that is associated with the quarter in which the forum was held, as well as in the annual report specified in § 155.1324(b) that is associated with the year in which the forum was held. The public forum shall be conducted in an in-person, virtual (that is, one that uses telephonic, digital, and/or web-based platforms), or hybrid (that is, one that provides for both in-person and virtual attendance) format.

* * * * *

PART 156—HEALTH INSURANCE ISSUER STANDARDS UNDER THE AFFORDABLE CARE ACT, INCLUDING STANDARDS RELATED TO EXCHANGES

■ 29. The authority citation for part 156 continues to read as follows:

Authority: 42 U.S.C. 18021–18024, 18031–18032, 18041–18042, 18044, 18054, 18061, 18063, 18071, 18082, and 26 U.S.C. 36B.

■ 30. Section 156.111 is amended by revising paragraphs (a), (b)(2), and (e)(2) and (3) to read as follows:

§ 156.111 State selection of EHB-benchmark plans for plan years beginning on or after January 1, 2020.

(a)(1) Subject to paragraphs (b) through (e) of this section, for plan years beginning on or after January 1, 2020, through December 31, 2025, a State may change its EHB-benchmark plan by:

(i) Selecting the EHB-benchmark plan that another State used for the 2017 plan year under §§ 156.100 and 156.110;

(ii) Replacing one or more categories of EHBs established at § 156.110(a) in the State's EHB-benchmark plan used for the 2017 plan year with the same category or categories of EHB from the EHB-benchmark plan that another State used for the 2017 plan year under §§ 156.100 and 156.110; or

(iii) Otherwise selecting a set of benefits that would become the State's EHB-benchmark plan.

(2) Subject to paragraphs (b) through (e) of this section, for plan years beginning on or after January 1, 2026, a State may change its EHB-benchmark plan by selecting a set of benefits that would become the State's EHB-benchmark plan.

(b) * * *

(2) *Scope of benefits.* (i) For plan years beginning on or after January 1, 2020, through December 31, 2025:

(A) Provide a scope of benefits equal to the scope of benefits provided under a typical employer plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), defined as either:

(*1*) One of the selecting State's 10 base-benchmark plan options established at § 156.100, and available for the selecting State's selection for the 2017 plan year; or

(*2*) The largest health insurance plan by enrollment within one of the five largest large group health insurance products by enrollment in the State, as product and plan are defined at § 144.103 of this subchapter, provided that:

(*i*) The product has at least 10 percent of the total enrollment of the five largest large group health insurance products in the State;

(*ii*) The plan provides minimum value, as defined under § 156.145;

(*iii*) The benefits are not excepted benefits, as established under § 146.145(b), and § 148.220 of this subchapter; and

(*iv*) The benefits in the plan are from a plan year beginning after December 31, 2013.

(B) Not exceed the generosity of the most generous among a set of comparison plans, including:

(*1*) The State's EHB-benchmark plan used for the 2017 plan year, and

(*2*) Any of the State's base-benchmark plan options for the 2017 plan year described in § 156.100(a)(1), supplemented as necessary under § 156.110.

(ii) For plan years beginning on or after January 1, 2026, provide a scope of benefits that is equal to the scope benefits of a typical employer plan in the State. The scope of benefits in a typical employer plan in a State is any scope of benefits that is as or more generous than the scope of benefits in the least generous plan (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), and as or less generous than the scope of benefits in the most generous plan in the State (supplemented by the State as necessary to provide coverage within each EHB category at § 156.110(a)), among the following:

(A) One of the selecting State's 10 base-benchmark plan options established at § 156.100, and available for the selecting State's selection for the 2017 plan year; or

(B) The largest health insurance plan by enrollment within one of the five

largest large group health insurance products by enrollment in the State, as product and plan are defined at § 144.103 of this subchapter, provided that:

(*1*) The product has at least 10 percent of the total enrollment of the five largest large group health insurance products in the State;

(*2*) The plan provides minimum value, as defined under § 156.145;

(*3*) The benefits are not excepted benefits, as established under § 146.145(b), and § 148.220 of this subchapter; and

(*4*) The benefits in the plan are from a plan year beginning after December 31, 2013.

* * * * *

(e) * * *

(2) An actuarial certification and an associated actuarial report from an actuary, who is a member of the American Academy of Actuaries, in accordance with generally accepted actuarial principles and methodologies, that affirms that the State's EHB-benchmark plan complies with the applicable scope of benefits requirements at paragraph (b)(2) of this section.

(3) The State's EHB-benchmark plan document that reflects the benefits and limitations, including medical management requirements, a schedule of benefits and, if the State is changing the number of prescription drugs pursuant to § 156.122(a)(1)(ii), a formulary drug list in a format and manner specified by HHS; and

* * * * *

■ 31. Section 156.115 is amended by revising paragraph (d) to read as follows:

§ 156.115 Provision of EHB.

* * * * *

(d) For plan years beginning on or before January 1, 2026, an issuer of a plan offering EHB may not include routine non-pediatric dental services, routine non-pediatric eye exam services, long-term/custodial nursing home care benefits, or non-medically necessary orthodontia as EHB. For plan years beginning on or after January 1, 2027, an issuer of a plan offering EHB may not include routine non-pediatric eye exam services, long-term/custodial nursing home care benefits, or non-medically necessary orthodontia as EHB.

■ 32. Section 156.122 is amended by adding paragraphs (a)(3)(i)(E) and (f) to read as follows:

§ 156.122 Prescription drug benefits.

(a) * * *

(3) * * *

(i) * * *

(E) For plan years beginning on or after January 1, 2026, include at minimum one patient representative who must:

(*1*) Represent the patient perspective as a member of the P&T committee.

(*2*) Have relevant experience or participation in patient or community-based organizations.

(*3*) Be able to demonstrate the ability to integrate data interpretations with practical patient considerations.

(*4*) Have no fiduciary obligation to a health facility or other health agency and have no material financial interest in the rendering of health services.

(5) Have a broad understanding of one or more conditions or diseases, associated treatment options, and research.

(6) Disclose financial interests on their conflict-of-interest statements. Disclosed financial interests must include all interests with any entity that would benefit from decisions regarding plan formularies as well as specific information about their financial interests, such as the nature of the relationship and the value of the financial interest.

* * * * *

(f) If a health plan covers prescription drugs in excess of the prescription drugs required to be covered under paragraph (a)(1) of this section, the additional prescription drugs are considered an essential health benefit and subject to requirements including the annual limitation on cost sharing and the restriction on annual and lifetime dollar limits, unless coverage of the drug is mandated by State action and is in addition to an essential health benefit pursuant to § 155.170, in which case the drug would not be considered an essential health benefit.

■ 33. Section 156.202 is amended by adding paragraphs (d) and (e) to read as follows:

§ 156.202 Non-standardized plan option limits.

* * * * *

(d) For plan year 2025 and subsequent years, an issuer may offer additional non-standardized plan options for each product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area if it demonstrates that these additional plans' cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions (including benefits in the form of prescription drugs, if pertaining to the treatment of the condition(s)) is at least 25 percent lower, as applied without restriction in scope throughout the plan year, than the cost sharing for the same corresponding benefits in an issuer's other non-standardized plan option offerings in the same product network type, metal level, and service area.

(1) The 25 percent reduction in cost sharing for benefits pertaining to the treatment of chronic and high-cost conditions will be evaluated at the level of total out-of-pocket costs for the treatment of the chronic and high-cost condition for a population of enrollees with the relevant chronic and high-cost condition.

(2) The reduction in cost sharing must not be limited to a part of the year, or an otherwise limited scope of benefits.

(3) The reduction in cost sharing for these benefits cannot be conditioned on a consumer having a particular diagnosis.

(4) The required reduction in cost sharing only applies to the standard variant of the plan for which an issuer seeks an exception, and not to the income-based cost-sharing reduction plan variations required by § 156.420(a), nor to the zero and limited cost-sharing plan variations required by § 156.420(b).

(5) Issuers are limited to one exception per product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area, for each chronic and high-cost condition.

(6) Chronic and high-cost conditions that may qualify an issuer for this exception will be determined by HHS.

(e) An issuer that seeks to utilize this exceptions process is required to submit a written justification in a form and manner and at a time prescribed by HHS that:

(1) Identifies the specific chronic and high-cost condition that its additional non-standardized plan option offers substantially reduced cost sharing for, in accordance with the definition of ''cost sharing'' at § 156.20;

(2) Identifies which benefits in the Plans and Benefits Template are discounted to provide reduced treatment-specific cost sharing for individuals with the specified chronic and high-cost condition. These discounts must be relative to the treatment-specific cost sharing for the same corresponding benefits in the issuer's other non-standardized plan offerings in the same product network type, metal level, inclusion of dental and/or vision benefit coverage, and service area. For the purposes of this standard, treatment specific cost sharing consists of the costs for obtaining services that pertain to the treatment of a particular chronic and high-cost condition—but not the costs for obtaining services that do not pertain to

the treatment of the relevant condition. The issuer must identify all services for which the benefits substantially reduce cost sharing in the Plans and Benefits Template. These benefits must encompass a complete list of relevant services pertaining to the treatment of the relevant condition;

(3) Explains how the reduced cost sharing for these services pertains to clinically indicated guidelines and a representative treatment scenario for treatment of the specified chronic and high-cost condition (and include any relevant studies, guidelines, or supplementary documents to support the application, as applicable). For the purposes of this standard, a representative treatment scenario is an annual course of treatment for a chronic and high-cost condition; and

(4) Includes a corresponding actuarial memorandum that explains the underlying actuarial assumptions made in the design of the plan the issuer is requesting to except. In this memorandum, an issuer must demonstrate how the benefits that are discounted to provide reduced treatment-specific cost sharing of at least 25 percent identified at § 156.202(e)(2) for the treatment of the condition identified at § 156.202(e)(1) under the excepted plan compare to the identified in-limit offering in the same product network type, metal level, inclusion of dental and/or vision coverage, and service area. This demonstration must specifically be in reference to the specific population that would be seeking treatment for the relevant condition and not the general population. This memorandum must also include an actuarial opinion confirming that this analysis was prepared in accordance with the appropriate Actuarial Standards of Practice and the profession's Code of Professional Conduct.

■ 34. Section 156.520 is amended by revising paragraph (f) to read follows:

§ 156.520 Loan terms.

* * * * *

(f) *Conversions and voluntary terminations.* (1) The loan recipient shall not convert or sell to a for-profit or non-consumer operated entity at any time after receiving a loan under this subpart. The loan recipient shall not undertake any transaction that would result in the CO–OP implementing a governance structure that does not meet the standards in this subpart.

(2) CMS may, in its sole discretion, approve a request by a loan recipient to voluntarily terminate its loan agreement with CMS, and cease to constitute a QNHII, for the purpose of permitting a loan recipient to pursue innovative business plans that are not otherwise consistent with the requirements of this subpart, provided that all outstanding CO–OP loans issued to the loan recipient are repaid in full prior to termination of the loan agreement, and CMS believes granting the request would meaningfully enhance consumer access to quality, affordable, member-focused, non-profit health care options in affected markets.

■ 35. Section 156.1215 is amended by revising paragraphs (b) and (c) to read as follows:

§ 156.1215 Payment and collections processes.

* * * * *

(b) *Netting of payments and charges for later years.* As part of its payment and collections process, HHS may net payments owed to issuers and their affiliates operating under the same tax identification number against amounts due to the Federal Government from the issuers and their affiliates under the same taxpayer identification number for advance payments of the premium tax credit, advance payments of and reconciliation of cost-sharing reductions, payment of federally facilitated Exchange user fees, payment of State Exchanges utilizing the Federal platform user fees, HHS risk adjustment, reinsurance, and risk corridors payments and charges, and administrative fees for utilizing the Federal Independent Dispute Resolution process in accordance with § 149.510(d)(2) of this subchapter.

(c) *Determination of debt.* Any amount owed to the Federal Government by an issuer and its affiliates for advance payments of the premium tax credit, advance payments of and reconciliation of cost-sharing reductions, Federally-facilitated Exchange user fees, including any fees for State-based Exchanges utilizing the Federal platform, HHS risk adjustment, reinsurance, risk corridors, and unpaid administrative fees for utilizing the Federal Independent Dispute Resolution process in accordance with § 149.510(d)(2), after HHS nets amounts owed by the Federal Government under these programs, is a determination of a debt.

Xavier Becerra,

Secretary, Department of Health and Human Services.

Aviva Aron-Dine,

Acting Assistant Secretary (Tax Policy), Department of the Treasury.

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Part III

Securities and Exchange Commission

17 CFR Parts 240 and 242
Disclosure of Order Execution Information; Final Rule

SECURITIES AND EXCHANGE COMMISSION

17 CFR Parts 240 and 242

[Release No. 34–99679; File No. S7–29–22]

RIN 3235–AN22

Disclosure of Order Execution Information

AGENCY: Securities and Exchange Commission.

ACTION: Final rule.

SUMMARY: The Securities and Exchange Commission (''Commission'' or ''SEC'') is adopting amendments to a rule under the Securities Exchange Act of 1934 (''Exchange Act'') that requires disclosures for order executions in national market system (''NMS'') stocks. First, the amendments expand the scope of reporting entities subject to the preexisting rule that requires market centers to make available to the public monthly execution quality reports to encompass broker-dealers with a larger number of customers. Next, the amendments modify the definition of ''covered order'' to include certain orders submitted outside of regular trading hours and certain orders submitted with stop prices. In addition, the amendments modify the information required to be reported under the rule, including changing how orders are categorized by order size as well as how they are categorized by order type. The amendments, as part of the changes to the order size categories, modify the rule to capture execution quality information for fractional share orders, odd-lot orders, and larger-sized orders. Additionally, the amendments modify reporting requirements for non-marketable limit orders (''NMLOs'') in order to capture more relevant execution quality information for these orders by requiring statistics to be reported from the time such orders become executable. The amendments modify time-to-execution categories and require average time to execution to be measured in increments of a millisecond or finer and calculated on a share-weighted basis for all orders. The amendments require that the time of order receipt and time of order execution be measured in increments of a millisecond or finer, and that realized spread be calculated at multiple time intervals. Finally, the amendments enhance the accessibility of the reported execution quality statistics by requiring all reporting entities to make a summary report available.

DATES:

Effective date: The final rules are effective June 14, 2024.

Compliance date: See section VII, titled ''Transition Matters,'' for further information on transitioning to the final rules.

FOR FURTHER INFORMATION CONTACT: Kathleen Gross, Senior Special Counsel, Lauren Yates, Senior Special Counsel, Susie Cho, Special Counsel, Christopher Chow, Special Counsel, David Michehl, Special Counsel, or Laura Harper Powell, Special Counsel at (202) 551–5500, Division of Trading and Markets, Commission, 100 F Street NE, Washington, DC 20549.

SUPPLEMENTARY INFORMATION: The Commission is adopting amendments to 17 CFR 242.600 (''Rule 600'') to add new defined terms to and modify certain existing defined terms in Rule 600 that are used in 17 CFR 242.605 (''Rule 605'') as amended, as well as amendments to Rule 605; and to make conforming amendments to defined terms in 17 CFR 242.602, 242.611, and 242.614; and conforming amendments to defined terms in 17 CFR 240.3a51–1, 240.13h–1, 242.105, 242.201, 242.204, and 242.1000.

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I. Introduction and Background

On December 14, 2022, the Commission proposed amendments to Rule 605 under Regulation National Market System (17 CFR 242.600 through 242.614) (''Regulation NMS'') to update the disclosure of order execution quality statistics in national market system (''NMS'') stocks.[1] Rule 605, formerly known as Rule 11Ac1–5, was adopted in 2000[2] and requires market centers[3] to

[1] *See* Securities Exchange Act Release No. 96493 (Dec. 14, 2022), 88 FR 3786 (Jan. 20, 2023) (''Proposing Release'').

[2] *See* Securities Exchange Act Release No. 43590 (Nov. 17, 2000), 65 FR 75414 at 75416 (Dec. 1, 2000) (Disclosure of Order Execution and Routing Practices) (''Rule 11Ac1–5 Adopting Release''). Along with Rule 11Ac1–5, the Commission also adopted Rule 11Ac1–6 as part of the Rule 11Ac1–5 Adopting Release. *See* 17 CFR 242.606 (''Rule 606''). When the Commission later adopted Regulation NMS in 2005, Rule 11Ac1–5 was re-designated as Rule 605, and Rule 11Ac1–6 was re-designated as Rule 606. See Securities Exchange Act Release No. 51808 (June 9, 2005), 70 FR 37496 (June 29, 2005) (''Regulation NMS Adopting Release''). Rule 606 requires the public disclosure of order routing practices and was amended in 2018. *See* Securities Exchange Act Release No. 84528 (Nov. 2, 2018), 83 FR 58338 (Nov. 19, 2018) (''2018 Rule 606 Amendments Release'').

[3] Regulation NMS defines the term ''market center'' to mean any exchange market maker, over-the-counter (''OTC'') market maker, alternative

make available standardized monthly reports of statistical information concerning covered orders [4] in NMS stocks [5] that they received for execution.[6] Prior to these amendments, the Rule 605 report contained a number of execution quality metrics for covered orders.[7] The information was categorized: by (1) individual security, (2) one of five order types,[8] and (3) one of four order sizes.[9] Within each of the three categories, the Rule 605 report that was required prior to these amendments included statistics about the total number of orders submitted, and the total number of shares submitted, shares cancelled prior to execution, shares executed at the receiving market center, shares executed at another venue, shares executed within different time-to-execution buckets, and average realized spread.[10] For market and marketable limit orders specifically, the report required by Rule 605 prior to these amendments also included statistics about the (1) average effective spread; (2) number of shares executed better than the quote, at the quote, or outside the quote; (3) average time to execution when executed better than the quote, at the quote, or outside the quote; and (4) average dollar amount per share that orders were executed better than the quote or outside the quote.[11] To calculate the required statistics, the time of order execution and time of order receipt were measured to the nearest second.[12]

At the time the Commission adopted Rule 11Ac1–5, there was little publicly available information to enable investors to compare and evaluate execution quality among different market centers.[13] Rule 605, along with Rule 606 of Regulation NMS, was adopted in 2000, and together these rules required the public disclosure of execution quality and order routing practices.[14] The Commission intended Rule 11Ac1–5 to provide awareness about how broker-dealers responded to trade-offs between price and other factors, such as speed or reliability, and establish a baseline level of disclosure in order to facilitate cross-market comparisons of execution quality.[15] The Commission reasoned that once investors could evaluate execution performance provided by various broker-dealers, competitive forces could then be brought to bear on broker-dealers both with respect to the explicit trading costs associated with brokerage commissions and the implicit trading costs associated with execution quality.[16]

The information disclosed under Rule 605 has provided significant insight into execution quality at different market centers.[17] However, Rule 605 has not been substantively updated since it was adopted in 2000. In the interim, equity market conditions have changed due in part to many technological advancements that have altered the speed and nature of trading. In addition, the participation of individual investors in the equity markets has increased.[18] Accordingly, the Commission is adopting amendments to Rule 605 to update and improve the disclosure of execution quality information by

trading system (''ATS''), national securities exchange, or national securities association. *See* final 17 CFR 242.600(b)(55). ''Exchange market maker'' means any member of a national securities exchange that is registered as a specialist or market maker pursuant to the rules of such exchange. *See* final 17 CFR 242.600(b)(37). ''OTC market makerrdquo; means any dealer that holds itself out as being willing to buy from and sell to its customers, or others, in the United States, an NMS stock for its own account on a regular or continuous basis otherwise than on a national securities exchange in amounts of less than a block size. *See* final 17 CFR 242.600(b)(75). ''Alternative trading system'' or ''ATS'' means any organization, association, person, group of persons, or system: (1) That constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange within the meaning of 17 CFR 240.3b–16; and (2) That does not: (i) Set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or (ii) Discipline subscribers other than by exclusion from trading. *See* 17 CFR 242.300(a). *See also* final 17 CFR 242.600(b)(4) (stating that ''alternative trading system'' has the meaning provided in 17 CFR 242.300(a)). ''National securities exchange'' means any exchange registered pursuant to section 6 of the Exchange Act. *See* final 17 CFR 242.600(b)(63). ''National securities associationrdquo; means any association of brokers and dealers registered pursuant to section 15A of the Exchange Act. *See* final 17 CFR 242.600(b)(62).

[4] Prior to these amendments, a ''covered order'' was defined to include any market order or any limit order (including immediate-or-cancel orders) received by a market center during regular trading hours at a time when a national best bid and national best offer (''NBBO'') is being disseminated, and, if executed, is executed during regular trading hours, and did not include any orders for which the customer requests special handling, including, but not limited to, market on open and market on close orders, stop orders, all or none orders, and ''not held'' orders. *See* prior 17 CFR 242.600(b)(22). Generally, a ''not held'' order provides the broker-dealer with price and time discretion in handling the order, whereas a broker-dealer must attempt to execute a ''held'' order immediately. *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58340, n.19 (Nov. 19, 2018).

[5] ''NMS stock'' is defined under Regulation NMS as any NMS security other than an option. *See* final 17 CFR 242.600(b)(65). An ''NMS security'' is defined as any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in listed options. *See* final 17 CFR 242.600(b)(64).

[6] *See* prior 17 CFR 242.605. The procedures for market centers to make their execution quality data available to the public are set forth in the National Market System Plan Establishing Procedures Under Rule 605 of Regulation NMS (''Rule 605 NMS Plan''). *See* prior 17 CFR 242.605(a)(2) and Securities and Exchange Commission File No. 4–518 (Rule 605 NMS Plan). *See also* Securities Exchange Act Release No. 44177 (Apr. 12, 2001), 66 FR 19814 (Apr. 17, 2001) (order approving the Rule 605 NMS Plan) (''Rule 605 NMS Plan Release'').

[7] *See* prior 17 CFR 242.605(a)(1); Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75423–25 (Dec. 1, 2000).

[8] *See* prior 17 CFR 242.605(a)(1). Prior to these amendments, ''Categorized by order type'' referred to categorization by whether an order is: (1) a market order, (2) a marketable limit order, (3) an inside-the-quote limit order, (4) an at-the-quote limit order, or (5) a near-the-quote limit order. *See* prior 17 CFR 242.600(b)(14).

[9] *See* prior 17 CFR 242.605(a)(1). Prior to these amendments, the size categories were: 100 to 499 shares; 500 to 1,999 shares; 2000 to 4,999 shares; and 5,000 or greater shares. *See* prior 17 CFR 242.600(b)(13). On June 22, 2001, the Commission granted exemptive relief to any order with a size of 10,000 shares or greater (''Large Order Exemptive Relief''), reasoning that the exclusion of very large orders would help assure greater comparability of statistics in the largest size category of 5,000 or greater shares. *See* letter from Annette L. Nazareth, Director, Division of Market Regulation to Darla C. Stuckey, Assistant Secretary, NYSE Group, Inc., dated June 22, 2001 (''Large Order Exemptive Letter'').

[10] *See* prior 17 CFR 242.605(a)(1)(i).

[11] *See* prior 17 CFR 242.605(a)(1)(ii).

[12] *See* prior 17 CFR 242.600(b)(91), (92).

[13] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75416 (Dec. 1, 2000). For clarity, when this release discusses the adoption of Rule 605, it is referring to the Rule 11Ac1–5 Adopting Release, *supra* note 2.

[14] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75416 (Dec. 1, 2000).

[15] *See id.* at 75418. Data obtained from Rule 605 reports are used by the third parties including academics and the financial press to study a variety of topics related to execution quality, including liquidity measurement, exchange competition, zero commission trading, and broker-dealer execution quality. *See* Proposing Release, 88 FR 3786 at 3833, n.545–547 (Jan. 20, 2023) and accompanying text.

[16] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75419 (Dec. 1, 2000). Although it is difficult to isolate the effects of Rule 605 given the evolution of the equity markets over time, one academic study examining the introduction of Rule 605 found that the routing of marketable order flow by broker-dealers became more sensitive to changes in execution quality across market centers after Rule 605 reports became available. *See* Ekkehart Boehmer et al., *Public Disclosure and Private Decisions: Equity Market Execution Quality and Order Routing,* 20 REV. FIN. STUD. 315 (2007) (''Boehmer et al.''). Another study attributed a significant decline in effective and quoted spreads following the implementation of Rule 605 to an increase in competition between market centers, who improved the execution quality that they offered in order to attract more order flow. *See* Xin Zhao & Kee H. Chung, *Information Disclosure and Market Quality: The Effect of SEC Rule 605 on Trading Costs,* 42 J. FIN. QUANTITATIVE ANALYSIS, 657 (Sept. 2007) (''Zhao & Chung'').

[17] *See* Securities Exchange Act Release No. 61358 (Jan. 14, 2010), 75 FR 3594 at 3604, n.55 (Jan. 21, 2010) (''Concept Release on Equity Market Structure'').

[18] *See* Proposing Release, 88 FR 3786 at 3787–88 (Jan. 20, 2023). As used in this release, ''individual investor'' refers to natural persons that trade relatively infrequently for their own or closely related accounts.

expanding the scope of entities subject to Rule 605, modifying the information required, and making key execution quality metrics more accessible to investors.

A. Overview of Need for Rule Modernization

The U.S. equity markets have evolved significantly in the last couple of decades. For instance, the equities markets have become increasingly fragmented, as both the market shares of individual national securities exchanges have decreased and an increased percentage of order flow has moved off-exchange. In 2000, there were nine registered national securities exchanges and one registered national securities association.[19] A large proportion of the order flow in listed equity securities was routed to a few, mostly manual, trading centers,[20] and the primary listing exchanges maintained a high percentage of the order flow for exchange-listed equities.[21]

In contrast, trading in the U.S. equity markets today is highly automated and spread even more among different types of trading centers, allowing even more choices about where orders may be routed. The types of trading centers that currently trade NMS stocks are: (1) national securities exchanges operating self-regulatory organization (''SRO'') trading facilities; [22] (2) ATSs that trade NMS stocks (''NMS Stock ATSs''); [23] (3) exchange market makers; (4) wholesalers; [24] and (5) any other broker-dealer that executes orders internally by trading as principal or crossing orders as agent.[25] Some OTC market makers, such as wholesalers, operate single-dealer platforms (''SDPs'') through which they execute institutional orders in NMS stocks against their own inventory.[26] In the first quarter of 2023, NMS stocks were traded on 16 national securities exchanges, and off-exchange at 33 NMS Stock ATSs and at over 220 other Financial Industry Regulatory Authority (''FINRA'') members.[27]Approximately 56% of NMS share volume was executed on national securities exchanges.[28] The majority of off-exchange share volume was executed by wholesalers, who executed over one quarter of total share volume (26.9%) and about 61% of off-exchange share volume.[29]

In addition, developments in trading further point toward the utility of amending Rule 605. Average stock prices have continued to increase over time,[30] and odd-lots [31] and fractional shares [32] continue to trade with increasing frequency. In addition, odd-lot quotes in higher-priced stocks continue to offer prices that are frequently better than the round lot NBBO for these stocks,[33] and this better-

[19] *See* Securities and Exchange Commission, Annual Report for fiscal year 2000, at 38 *available at https://www.sec.gov/pdf/annrep00/ar00full.pdf.*

[20] *See* Securities Exchange Act Release Nos. 78309 (July 13, 2016), 81 FR 49432 at 49436 (July 27, 2016) (''Rule 606 Amendments Proposing Release''); 42450 (Feb. 23, 2000), 65 FR 10577 at 10579–80 (Feb. 28, 2000) (''Fragmentation Release'').

[21] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75415 (Dec. 1, 2000) (stating that in Sep. 2000, for example, the New York Stock Exchange Inc. (''NYSE'') accounted for 83.3% of the share volume in NYSE equities and that the American Stock Exchange, LLC (''Amex'') accounted for 69.9% of share volume in Amex equities). *See also* Concept Release on Equity Market Structure, 75 FR 3594 at 3595 (Jan. 21, 2010) (stating that in Jan. 2005, NYSE executed approximately 79.1% of the consolidated share volume in its listed stocks, as compared to 25.1% in Oct. 2009). In addition, NYSE-listed stocks were traded primarily on the floor of the NYSE in a manual fashion until Oct. 2006, at which time NYSE began to offer fully automated access to its displayed quotations. *See id.* at 3594–95. However, stocks traded on the NASDAQ Stock Market LLC (''NASDAQ''), which in 2000 was owned and operated by a national securities association, were already trading in a highly automated fashion at many different trading centers. *See id.* at 3595; Fragmentation Release, 65 FR 10577 at 10580 (Feb. 28, 2000). *See also* Proposing Release, 88 FR 3786 at 3791, n.76 (Jan. 20, 2023).

[22] *See final* 17 CFR 242.600(b)(100) (defining ''SRO trading facility'' as, among other things, a facility operated by a national securities exchange that executes orders in a security).

[23] An ''NMS Stock ATS'' as used in this release is an ATS that has filed an effective Form ATS–N with the Commission.

[24] The term ''wholesaler'' is not defined in Regulation NMS, but is commonly used to refer to an OTC market maker that seeks to attract orders from broker-dealers that service the accounts of a large number of individual investors. The primary business model of wholesalers is to trade internally as principal with individual investor orders. They do not publicly display or otherwise reveal the prices at which they are willing to trade internally as a means to attract individual investor orders from broker-dealers.

[25] *See* 15 U.S.C. 78c(a)(4)(A) (defining ''broker'' generally as any person engaged in the business of effecting transactions in securities for the account of others); 15 U.S.C. 78c(a)(5)(A) (defining ''dealer'' generally as any person engaged in the business of buying and selling securities for such person's own account through a broker or otherwise). The term ''broker-dealer'' is used in this release to encompass all brokers, all dealers, and firms that are both brokers and dealers. See also final 17 CFR 242.600(b)(106) (defining ''trading center''). Broker-dealers that primarily service the accounts of individual investors (referred to in this release as ''retail brokers'') often route the marketable orders of individual investors in NMS stocks to wholesalers.

[26] *See* Proposing Release, 88 FR 3786 at 3860, n.768 (Jan. 20, 2023) and accompanying text.

[27] *See infra* Table 6. See also Proposing Release, 88 FR 3786 at 3860, n.766 (Jan. 20, 2023) and accompanying text; and 3861 (Table 7).

[28] *See infra* Table 6. *See also* Proposing Release, 88 FR 3786 at 3860, n.767 (Jan. 20, 2023) and accompanying text; and 3861 (Table 7).

[29] *See infra* Table 6. *See also* Proposing Release, 88 FR 3786 at 3861 (Table 7) (Jan. 20, 2023).

[30] *See* Securities Exchange Act Release No. 90610 (Dec. 9, 2020), 86 FR 18596 at 18606–07 (Apr. 9, 2021) (''Market Data Infrastructure (''MDI'') Adopting Release'') (*citing* Securities Exchange Act Release No. 88216 (Feb. 14, 2020), 85 FR 16726 at 16739 (Mar. 24, 2020) (''MDI Proposing Release'')) (stating that ''between 2004 and 2019, the average price of a stock in the Dow Jones Industrial Average nearly quadrupled''). *See also* Proposing Release, 88 FR 3786 at 3787, n.16 (Jan. 20, 2023).

[31] *See* MDI Adopting Release, 86 FR 18596 at 18616 (Apr. 9, 2021) (describing analyses included in the MDI Adopting Release confirming observations made in the MDI Proposing Release that a significant proportion of quotation and trading activity occurs in odd-lots, particularly for frequently traded, high-priced stocks); and Proposing Release, 88 FR 3786 at 3792, n.91 (Jan. 20, 2023) (describing analysis using the NYSE Trade and Quote database (obtained via Wharton Research Data Services (''WRDS'')) (''TAQ data'' or ''NYSE TAQ data'') that found that odd-lots increased from around 15% of trades in Jan. 2014 to more than 55% of trades in Mar. 2022). An analysis of data from the SEC's Market Information Data Analytics System (''MIDAS'') analytics tool available at *https://www.sec.gov/marketstructure/datavis.html*#.YoPskqjMKUk shows that, in Q1 2023, odd-lots made up 80.5% of on-exchange trades (37.3% of volume) for stocks in the highest price decile and 18.8% of on-exchange trades (1.2% of volume) for stocks in the lowest price decile. *See* dataset ''Summary Metrics by Decile and Quartile'' *available at https://www.sec.gov/marketstructure/downloads.html. See also* Proposing Release, 88 FR 3786 at 3792, n.91 (Jan. 20, 2023).

[32] Analysis using Consolidated Audit Trail (''CAT'') data for executed orders in Aug. 2023 found that an estimated 67.4 million originating orders with a fractional share component were eventually executed on- or off-exchange. Orders with a fractional share component represented approximately 4% of all executed orders and 22% of executed orders from ''individual'' accounts. Generally, accounts classified as ''individual'' in CAT are attributed to natural persons. *See also* Proposing Release, 88 FR 3786 at 3792, n.92 (Jan. 20, 2023).

[33] *See* MDI Adopting Release, 86 FR 18596 at 18729 (Apr. 9, 2021) (describing analysis using data from May 2020 and finding that approximately 45% of all trades executed on exchange and approximately 10% of all volume executed on exchange in corporate stocks and exchange-traded funds (''ETFs'') (6,926 unique symbols) occurred in odd-lot sizes (*i.e.,* less than 100 shares) and 40% of those odd-lot transactions (representing approximately 35% of all odd-lot volume) occurred at a price better than the NBBO). In addition, a recent academic working paper shows that odd-lots offer better prices than the NBBO 18% of the time for bids and 16% of the time for offers. This percentage increases monotonically in the stock price, for example, for bid prices, increasing from 5% for the group of lowest-price stocks in their sample, to 42% for the group of highest-priced stocks. *See* Robert P. Bartlett, Justin McCrary, and Maureen O'Hara, *The Market Inside the Market: Odd-Lot Quotes* (working paper Feb. 1, 2022), *available at* SSRN: *https://ssrn.com/abstract=4027099* (retrieved from SSRN Elsevier database) (''Bartlett, et al.''). *See also* Elliot Banks, BMLL Technologies, Inside the SIP and the Microstructure of Odd-Lot Quotes (observing an upward trend in odd-lot trading inside the NBBO

priced odd-lot liquidity is distributed across multiple price levels.[34] In addition, odd-lot rates [35] have increased among lower priced stocks.[36] Because Rule 605 size categories prior to these amendments excluded orders smaller than 100 shares, a significant proportion of market activity was excluded.[37] An analysis of Rule 605 data shows that Rule 605 coverage has declined in the decades since the initial adoption of Rule 605.[38] Further, because order size categories were tied to the number of shares, the categories may have grouped orders of very different notional values, which might have complicated comparisons of aggregate execution quality. Finally, the speed of trading in the market has increased exponentially since 2000,[39] rendering the 1 second timestamp conventions of preexisting Rule 605 less informative.

Moreover, since the adoption of Rule 605, the Commission and its staff have continually assessed market events and their impact on market structure, with much of this effort aimed at achieving enhanced transparency for investors.[40] In 2010, the Commission issued a Concept Release on Equity Market Structure seeking public comment on, among other things, the metrics for assessing the performance of the current market structure and the effectiveness of tools such as Rule 605 reports to protect investor interests.[41] In 2015, the Commission formed the Equity Market Structure Advisory Committee (''EMSAC''), which considered issues related to Regulation NMS and equity market structure.[42] The EMSAC recommended that the Commission amend Rule 605 to modernize it and increase the usefulness of available execution quality disclosures.[43] In addition, one broker-dealer petitioned the Commission to amend Rule 605.[44]

In 2018, the Commission modified Rule 606, which requires broker-dealers to disclose the identity of market centers to which they route orders on behalf of customers.[45] Rule 606(a)(1), which focuses on held orders,[46] requires broker-dealers to produce quarterly public reports regarding their routing of non-directed orders [47] in NMS stocks that are submitted on a held basis and these reports include the identity of regularly used venues, the percentage of orders routed to each venue, and information about the broker-dealer's relationship with each venue.[48] When adopting the 2018 Rule 606 Amendments, the Commission identified intensified competition for customer orders, the rise in the number of trading centers, and the introduction of new fee models for execution services as the main concerns with held orders for NMS stocks that it sought to address with the proposal.[49] The Commission adopted enhanced public disclosures pursuant to Rule 606(a)(1) that focused on increased transparency for the financial inducements that broker-dealers face when determining where to route held order flow.[50] The Commission also adopted Rule 606(b)(3) to require detailed, customer-specific order handling disclosures that can be requested by a customer that places, directly or indirectly, one or more orders in NMS stocks that are submitted on a not held basis.[51]

At the time of the 2018 Rule 606 Amendments, the Commission considered suggestions from the EMSAC and other commenters that the Commission include more or different execution quality statistics in the required disclosures.[52] But the Commission stated that the enhancements to Rule 606(a) that it was adopting were appropriately designed to enable customers- and retail customers in particular-to better assess their broker-dealers' order routing performance and, in particular, potential conflicts of interest that their broker-dealers face when routing customer orders and how their broker-dealers manage those potential

from Jan. 2019 to Jan. 2022). *See also* Proposing Release, 88 FR 3786 at 3792, n.93 (Jan. 20, 2023).

[34] *See* MDI Adopting Release, 86 FR 18596 at 18613 n.202 (Apr. 9, 2021) (describing analysis included in the MDI Adopting Release that examined quotation data for the week of May 22–29, 2020 for stocks priced from $250.01 to $1000.00 and found that there is odd-lot interest priced better than the new round lot NBBO 28.49% of the time, and, in 48.49% of those cases, there are better priced odd-lots at multiple price levels). *See also* Proposing Release, 88 FR 3786 at 3792, n.94 (Jan. 20, 2023).

[35] The odd-lot rate is the total number of odd-lot trades divided by the total number of all trades.

[36] For example, odd-lot rates for corporate stock price deciles 1–3 (the lowest priced corporate stocks comprising 30% of all corporate stocks) have been higher on average in 2021, 2022, and Sep. 2023 (34%, 34%, 34%) as compared to 2019 and 2020 (23%, 27%). Similarly, exchange-traded products (''ETPs'') also exhibit higher average odd-lot rates in price quartiles 1 and 2 (the lowest priced ETPs comprising 50% of all ETPs) on average in 2021, 2022, and Sep. 2023 (26%, 28%, 28%) compared to 2019 and 2020 (19%, 22%). Analysis has been updated based on MIDAS, *available at https://www.sec.gov/opa/data/market-structure/marketstructuredownloadshtml-by__decile__and__quartile. See also* Proposing Release, 88 FR 3786 at 3792, n.95 (Jan. 20, 2023).

[37] *See* Proposing Release, 88 FR 3786 at 3792, n.91–92 (Jan. 20, 2023). *See also id.* at 3840, n.619–622 and accompanying text (estimating, based on analysis of Tick Size Pilot data, coverage of current Rule 605 reporting requirements).

[38] *See id.* at 3841 (Figure 3) (describing analysis comparing one market center's volume (NYSE) to TAQ data that showed that an estimated 50% of shares executed during regular market hours were included in Rule 605 reports as of Feb. 2021, and showed that this number has been on a slightly downward trend since around mid–2012).

[39] Analysis of data from the SEC's MIDAS analytics tool shows that the percent of on-exchange NMLOs that are fully executed within 1 millisecond (as a percentage of all fully executed on-exchange NMLOs) has increased from 2.1% in Q1 2012 to 11.7% in Q1 2023 for small cap stocks, and from 5.9% in Q1 2012 to 14.0% in Q1 2023 for large cap stocks. Further, in Q1 2023 nearly half (48.0%) of NMLOs executed in less than 1 second in large market capitalization stocks. See dataset ''Conditional Cancel and Trade Distribution,'' *available at https://www.sec.gov/marketstructure/downloads.html. See also infra* notes 1216–1217 and accompanying text. *See also* Proposing Release, 88 FR 3786 at 3792, n.98 (Jan. 20, 2023).

[40] For example, since the adoption of Rule 605 in 2000, the Commission has periodically revised certain of its NMS rules, including the adoption of Regulation NMS in 2005. *See, e.g.,* Regulation NMS Adopting Release, 70 FR 37496 (June 29, 2005); and MDI Adopting Release, 86 FR 18596 (Apr. 9, 2021).

[41] *See* Concept Release on Equity Market Structure, 75 FR 3594 at 3605 (Jan. 21, 2010).

[42] The archives of these meetings are available at *https://www.sec.gov/spotlight/emsac/emsac-archives.htm.*

[43] *See* Transcript from EMSAC Meeting (Aug. 2, 2016), *available at https://www.sec.gov/spotlight/emsac/emsac-080216-transcript.txt* (''EMSAC I''); Transcript from EMSAC Meeting (Nov. 29, 2016), *available at https://www.sec.gov/spotlight/equity-market-structure/emsac-transcript-112916.txt* (''EMSAC II''); EMSAC Recommendations Regarding Modifying Rule 605 and Rule 606 (''EMSAC III''), Nov. 29, 2016, *available at https://www.sec.gov/spotlight/emsac/emsac-recommendations-rules-605-606.pdf.*

[44] *See* Letter from Virtu Financial re Petition for Rulemaking to Amend SEC Rule 605 (Sept. 20, 2021) (''Virtu Petition''), *available at https://www.sec.gov/rules/petitions/2021/petn4-775.pdf.*

[45] The amendments to Rule 606 in 2018 (''2018 Rule 606 Amendments'') also modified Rule 605 to require that the public order execution quality reports be kept publicly available for a period of three years. *See* 2018 Rule 606 Amendments Release, 83 FR 58338 (Nov. 19, 2018).

[46] *See supra* note 4 (discussing held and not held orders).

[47] A ''non-directed order'' means any order from a customer other than a directed order. *See* final 17 CFR 242.600(b)(66). A ''directed order'' means an order from a customer that the customer specifically instructed the broker or dealer to route to a particular venue for execution. See final 17 CFR 242.600(b)(32).

[48] *See* 17 CFR 242.606(a)(1). Held orders are typically used by individual investors. *See, e.g.,* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58372 (Nov. 19, 2018) (stating that retail investors' orders are typically submitted on a held basis and are typically smaller in size).

[49] *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58372 (Nov. 19, 2018).

[50] *See id.* at 58373.

[51] *See* 17 CFR 242.606(b)(3); 2018 Rule 606 Amendments Release, 83 FR 58338 at 58345 (Nov. 19, 2018) (stating that by using the not held order distinction, Rule 606(b)(3) as adopted will likely result in more Rule 606(b)(3) disclosures for order flow that is typically characteristic of institutional customers—not retail customers—and will likely cover all or nearly all of the institutional order flow).

[52] *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58379 (Nov. 19, 2018). *See also* Proposing Release, 88 FR 3786 at 3790, n.66 (Jan. 20, 2023) and accompanying text.

conflicts.[53] The Commission further stated the limited modifications being adopted at that time were reasonably designed to further the goal of enhancing transparency regarding broker-dealers' order routing practices and customers' ability to assess the quality of those practices, and that the suggested execution quality statistics were not necessary to achieve that goal.[54] However, the Commission stated that its determination not to adopt the additional specific disclosures was not an indication that the Commission had formed a decision on the validity or usefulness of the suggested execution quality statistics.[55]

Separately, each broker-dealer has a legal duty to seek to obtain best execution of customer orders.[56] The duty of best execution requires broker-dealers to execute customers' trades at the most favorable terms reasonably available under the circumstances.[57] When adopting Rules 605 and 606, the Commission stated that these rules do not address and therefore do not change the existing legal standards that govern a broker-dealer's duty of best execution.[58] The Commission recognized that the information contained in the Rule 605 reports (and Rule 606 reports) will not, by itself, be sufficient to support conclusions regarding a broker-dealer's compliance with its legal responsibility to obtain the best execution of customer orders.[59] As the Commission stated, any such conclusions would require a more in-depth analysis of the broker-dealer's order routing practices than will be available from the disclosures required by the rules.[60]

B. Overview of the Proposal and Comments Received

In acknowledgment of the myriad changes to the securities markets since the adoption of Rule 605 more than two decades ago, the proposed amendments to Rule 605 sought to ensure the continued transparency and utility of the execution quality statistics required by Rule 605. The Commission proposed to amend Rule 605 by expanding the scope of reporting entities to include broker-dealers with a larger number of customers (''larger broker-dealers'').[61] The Commission also proposed to modify the set of required data to capture execution quality information for more order types and sizes, require time-based execution statistics to be at a more granular level, and enhance the utility of the statistics.[62] The Commission further proposed to require that reporting entities provide a report of summary execution quality statistics, in addition to the more detailed reports.[63]

The Commission received numerous comment letters in response to the Proposing Release, a large portion of which were from individual investors.[64] Many commenters supported updating the disclosures required by Rule 605.[65] Several commenters, including industry groups, broker-dealers, financial services firms,[66] and investor advocacy groups, suggested clarifications or changes to the scope of reporting entities and to certain proposed metrics included in the detailed report or summary report.[67] Other commenters broadly supported the more detailed recommendations of other commenters.[68]

One industry group recommended that the Commission reissue the proposed rule after incorporating comments from it and other market participants ''to ensure that the final rule achieves the Commission's intended purpose and allow market participants to identify additional enhancements.'' [69] A broker-dealer

[53] *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58379 (Nov. 19, 2018).

[54] *See id.* The Commission further stated that the amendments to Rule 606 provide an appropriate level of insight into the widespread financial arrangements between broker-dealers and execution venues that may affect broker-dealers' order routing decisions. *See id.*

[55] *See id.*

[56] *See, e.g.,* Regulation NMS Adopting Release, 70 FR 37496 at 37537 (June 29, 2005); *Newton* v. *Merrill, Lynch, Pierce, Fenner & Smith, Inc.,* 135 F.3d 266, 269–70, 274 (3d Cir.), *cert. denied,* 525 U.S. 811 (1998); *Certain Market Making Activities on Nasdaq,* Securities Exchange Act Release No. 40900, 53 SEC 1150, 1162 (1999) (settled case) (*citing Sinclair* v. *SEC*, 444 F.2d 399 (2d Cir. 1971); *Arleen Hughes*, 27 SEC 629, 636 (1948), *aff'd sub nom. Hughes* v. *SEC*, 174 F.2d 969 (D.C. Cir. 1949)). In addition, the Commission has separately proposed a rule concerning broker-dealers' duty of best execution. *See* Securities Exchange Act Release No. 96496 (Dec. 14, 2022), 88 FR 5440 (Jan. 27, 2023) (''Regulation Best Execution Proposing Release''). *See also* Proposing Release, 88 FR 3786 at 3790, n.69 (Jan. 20, 2023).

[57] *See* Regulation NMS Adopting Release, 70 FR 37496 at 37538 (June 29, 2005) (referring to the best reasonably available price and citing *Newton*, 135 F.3d at 266, 269–70, 274). *Newton* also specified certain other factors relevant to best execution—order size, trading characteristics of the security, speed of execution, clearing costs, and the cost and difficulty of executing an order in a particular market. *See Newton*, 135 F.3d at 270, n.2. *See also* Proposing Release, 88 FR 3786 at 3791, n.70 (Jan. 20, 2023).

[58] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75420 (Dec. 1, 2000).

[59] *See id.*

[60] *See id.* For example, the execution quality statistics included in Rule 605 do not encompass every factor that may be relevant in determining whether a broker-dealer has obtained best execution, and the statistics in a market center's reports typically will reflect orders received from a number of different routing broker-dealers. *See id. See also infra* notes 1097–1098 and accompanying text for discussion of an investment adviser's fiduciary duty, including the duty to seek best execution of a client's transactions where the investment adviser has the responsibility to select broker-dealers to execute client trades. *See also* Proposing Release, 88 FR 3786 at 3791 (Jan. 20, 2023).

[61] *See* Proposing Release, 88 FR 3786 at 3796–3801 (Jan. 20, 2023). Throughout the release, the term ''larger broker-dealer'' refers to a broker-dealer that meets or exceeds the ''customer account threshold,'' as defined in final Rule 605(a)(7). *See also infra* section II.A.

[62] *See* Proposing Release, 88 FR 3786 at 3804–22 (Jan. 20, 2023).

[63] *See id.* at 3823–25.

[64] The Commission received comments from a wide range of market participants, including individual investors, broker-dealers, academics, securities industry groups, national securities exchanges, and investor advocacy groups. Comments received on the Proposing Release are available on the Commission's website, *available at https://www.sec.gov/comments/s7-29-22/s72922.htm.*

[65] *See, e.g.,* letters from: Ellen Greene, Managing Director, Equity Options Market Structure, SIFMA (Mar. 31, 2023) (''SIFMA Letter II'') at 2; Stephen John Berger, Managing Director, Global Head of Government and Regulatory Policy, Citadel Securities (Mar. 31, 2023) (''Rule 605 Citadel Letter'') at 1; Stephen W. Hall, Legal Director and Securities Specialist, Better Markets, Inc. (Mar. 31, 2023) (''Better Markets Letter'') at 1–2.

[66] As used in this release, ''financial services firm'' refers to an entity that includes multiple types of affiliated entities providing financial services, including broker-dealers, investment advisers, or banks.

[67] *See, e.g.,* SIFMA Letter II at 27–28; and letters from: Howard Meyerson, Managing Director, Financial Information Forum (Mar. 31, 2023) (''FIF Letter'') at 2–5; Tyler Gellasch, President and CEO, Healthy Markets Association (Mar. 31, 2023) (''Healthy Markets Letter'') at 16–18; Douglas A. Cifu, Chief Executive Officer, Virtu Financial, Inc. (Mar. 30, 2023) (''Virtu Letter II'') at 10–12. These and other comment letters discussing the scope of reporting entities and proposed metrics included in the detailed report or summary report are described infra throughout this release.

[68] *See, e.g.,* Rule 605 Citadel Letter at 5; and letters from: Ryan Kwiatkowski, Chairman of the Board, and James Toes, President & CEO, Security Traders Association (Apr. 3, 2023) (''STA Letter'') at 4–5; Derrick Chan, Head of Equities, Fidelity Capital Markets (Mar. 31, 2023) (''Fidelity Letter'') at 2, 8; Naureen Hassan, President, UBS Americas, Robert Karofsky, President, UBS Investment Bank, and Suni Harford, President, UBS Asset Management, UBS (Mar. 31, 2023) (''UBS Letter'') at 2; Tim Gately, Managing Director, Head of Equities Sales, Americas, Citigroup Global Markets Inc. (Mar. 31, 2023) (''CGMI Letter'') at 1–2, 3; Jason Clague, Managing Director, Head of Operations, The Charles Schwab Corporation (Mar. 31, 2023) (''Schwab Letter II'') at 2, 30, 33. These and other comment letters discussing the recommendations of other commenters are described infra throughout this release. Several individual investors stated that in Dec. 2022, FINRA and the Commission sent out risk alerts regarding a lack of compliance with reports pursuant to Rule 606 of Regulation NMS and that ''one would suspect that brokers will be as non-compliant with the new 605 reports.'' Letter Type D; Letter Type E; and Letter Type H at *https://www.sec.gov/comments/s7-29-22/s72922.htm.* The Commission will monitor the implementation of the amendments to Rule 605.

[69] Letter from Howard Meyerson, Managing Director, Financial Information Forum (June 22, 2023) (''FIF Letter II'') at 11. *See also* letter from Howard Meyerson, Managing Director, Financial

stated that the Commission should provide market participants the opportunity to review and comment on such a revised proposal prior to finalization.[70] The Commission does not agree with these commenters. Delaying the adoption of a final rule, and thereby delaying the benefits of Rule 605, is not warranted. The Commission has reviewed and carefully considered the extensive comment file,[71] which included input from a broad array of market participants, and as discussed below, has made certain changes in response to these comments.[72] For these reasons, re-proposal of the Rule 605 amendments is not necessary.

Contemporaneously with the proposal to modify Rule 605, the Commission issued three other proposals related to separate aspects of equity market structure and Regulation NMS.[73] A number of commenters provided comments on all four proposals jointly.[74] Some commenters requested that the Commission publicly release anonymized subsets of CAT data used in connection with the tables and figures in the proposals' economic analyses.[75]

The Commission is not releasing anonymized subsets of CAT data used in connection with the proposals, including CAT data used in connection with data and figures in the Proposing Release. The CAT database contains highly sensitive and granular market information.[76] The Commission fully described in the Proposing Release and this Release the CAT data used, the methodology for analysis, and the results of its analyses. This provides notice of the Commission's use and analysis of CAT data in support of this rulemaking.[77]

Market participants, such as broker-dealers, may analyze their own order and transaction information as well as commercially available data and use this analysis to provide meaningful comment on the Proposing Release from their own perspectives.[78] The level of aggregation that would be required to protect market and proprietary information so that it cannot be used, either itself, or with other commercially or publicly available information, to reverse engineer or otherwise reveal market participants' identities, market

Information Forum (Feb. 14, 2024) (''FIF Letter III'') at 2, 5.

[70] *See* letter from Stephen John Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel Securities (Dec. 5, 2023) (''Equity Market Structure Citadel Letter II'') at 3.

[71] The Commission voted to issue the Proposing Release on Dec. 14, 2022. The release was posted on the Commission's website that day, and comment letters were received beginning the same day. The comment period closed on Mar. 31, 2023. The Commission has considered comments received since Dec. 14, 2022.

[72] In addition, as discussed above, the EMSAC and commenters responding to the Commission's Concept Release on Equity Market Structure and to the 2018 Rule 606 Amendments recommended that the Commission update Rule 605 and one broker-dealer petitioned the Commission to amend the Rule. *See supra* notes 40–44, 52, and accompanying text. The Commission considered these suggestions when proposing amendments to Rule 605. *See* Proposing Release, 88 FR 3786 at 3792–95 (Jan. 20, 2022).

[73] *See* Regulation Best Execution Proposing Release, 88 FR 5440 (Jan. 27, 2023) (proposing rule that would establish Commission rule-based best execution standards); and Securities Exchange Release Nos. 96494 (Dec. 14, 2022), 87 FR 80266 (Dec. 29, 2022) (''Minimum Pricing Increments Proposing Release'') (proposing amendments to Regulation NMS to reduce minimum pricing increments, add a minimum trading increment, reduce access fee caps, improve transparency of exchange fees and rebates, and enhance the transparency of market data infrastructure); 96495 (Dec. 14, 2022), 88 FR 128 (Jan. 3, 2023) (''Order Competition Rule Proposing Release'') (proposing rule that would enhance competition for the execution of marketable orders of individual investors).

[74] *See, e.g.,* SIFMA Letter II (Mar. 31, 2023); Equity Market Structure Citadel Letter II (Dec. 5, 2023); and letters from: Michael Blaugrund, Chief Operating Officer, NYSE Group, Inc., Jason Clague, Managing Director, Head of Operations, Charles Schwab & Co., and Joseph Mecane, Head of Execution Services, Citadel Securities (Mar. 6, 2023) (''NYSE, Schwab, and Citadel Letter''); Christopher A. Iacovella, President & Chief Executive Officer, American Securities Association (Mar. 31, 2023) (''American Securities Association Letter II''); Hope Jarkowski, General Counsel, NYSE Group, Inc. (Mar. 31, 2023) (''NYSE Letter''); Stephen John Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel Securities (Mar. 31, 2023) (''Equity Market Structure Citadel Letter''); Jason Clague, Managing Director, Head of Operations, The Charles Schwab Corporation (Mar. 22, 2023) (''Schwab Letter''); Kirsten Wegner, Chief Executive Officer, Modern Markets Initiative (Mar. 24, 2023) (''Modern Markets Initiative Letter''); Joanna Mallers, Secretary, FIA Principal Traders Group (Mar. 31, 2023) (''FIA PTG Letter II''); Peter D. Stutsman, Global Head of Equity Trading, and Timothy J. Stark, Head of Equity Markets and Transaction Research, The Capital Group Companies, Inc. (Mar. 31, 2023) (''Capital Group Letter''); Andrew Hartnett, NASAA President and Deputy Commissioner, Iowa Insurance Division, North American Securities Administrators Association, Inc. (Mar. 31, 2023) (''NASAA Letter''); David Howson, Executive Vice President, Global President, Cboe Global Markets, Nathaniel N. Evarts, Managing Director, Head of Trading, Americas, State Street Global Advisors, Kimberly Russell, Market Structure Specialist, Global SPDR Business, State Street Global Advisors, Mehmet Kinak, Global Head of Equity Trading, T. Rowe Price, Todd Lopez, Americas Head of Execution Services, UBS Securities LLC, and Douglas A. Cifu, Chief Executive Officer, Virtu Financial, Inc. (Mar. 24, 2023) (''Cboe, State Street, et al., Letter''); John A. Zecca, Executive Vice President, Global Chief Legal, Risk & Regulatory Officer, Nasdaq, Inc. (Mar. 30, 2023) (''Nasdaq Letter''); Jennifer W. Han, Executive Vice President, Chief Counsel & Head of Global Regulatory Affairs, Managed Funds Association (Mar. 30, 2023) (''Managed Funds Association Letter''); Jonathan Kanter, Assistant Attorney General, Antitrust Division, U.S. Department of Justice (Apr. 11, 2023) (''DOJ Letter''); Nathanial N. Evarts, Managing Director, Head of Trading, Americas, and Kimberly Russell, Market Structure Specialist, Global SPDR Business, State Street Global Advisors (Mar. 30, 2023) (''State Street Global Advisors Letter''); Michael Markunas, Deputy General Counsel, Chief Compliance Officer, B. Riley Securities, Inc. (Mar. 31, 2023) (''B. Riley Letter'').

[75] *See, e.g.,* Virtu Letter at 1; Equity Market Structure Citadel Letter at 16–17; Schwab Letter II at 3–4 (''there is a distinct absence of economic data to support many aspects of the Proposals and to support the Commission's analysis of costs versus benefits . . . CAT data is not publicly available and thus public commenters . . . do not have access to the very data on which the Commission relies''); and letters from: Ellen Greene, Managing Director, Equity & Options Market Structure, SIFMA (Feb. 8, 2023) (''SIFMA Letter'') at 3–4; Kristen Malinconico, Director, Center for Capital Markets Competitiveness, U.S. Chamber of Commerce (Mar. 31, 2023) (''Chamber of Commerce Letter'') at 2–3. Some of these commenters also requested that the Commission identify the specific broker-dealers whose Rule 605 and Rule 606 reports, which are publicly available, were used in the proposals. *See, e.g.,* SIFMA Letter at 2; Virtu Letter at 1–2.

[76] *See, e.g.,* Securities Exchange Act Release No. 67457 (July 18, 2012), 77 FR 45722 at 56978 (Aug. 1, 2012) (stating that maintaining the confidentiality of customer and other information reported to CAT ''is essential'' and that ''[w]ithout adequate protections, market participants would risk the exposure of highly-confidential information about their trading strategies and positions''); Securities Exchange Act Release No. 84696 (Nov. 15, 2016), 81 FR 84696 (Nov. 23, 2016) (stating that a security breach involving CAT data could, among other things, ''leak highly-confidential information about trading strategies or positions, which could be deleterious for market participants' trading profits and client relationships'' or ''expose proprietary information about the existence of a significant business relationship with either a counterparty or a client, which could reduce business profits'').

[77] In addition, the Commission declines to provide the identities of the specific broker-dealers whose Rule 606 reports were used in connection with the Proposing Release. *See supra* note 75. The reports themselves are publicly available and interested parties can analyze these reports using their own selection of broker-dealers. As with the CAT data, the Commission has fully described in the Proposing Release the Rule 606 data used, the methodology for analysis, and the results of its analyses. This information provides notice of the Commission's use and analysis of Rule 606 data used in support of this rulemaking.

[78] For example, the SEC's MIDAS analytics tool collects and processes data from the consolidated tapes as well as from the separate proprietary feeds made individually available by each equity exchange. *See MIDAS: Market Information Data Analytics System,* SEC, *available at https://www.sec.gov/marketstructure/midas-system. See also* letter from John Ramsay, Chief Market Policy Officer, Investors Exchange LLC (''IEX'') (Oct. 13, 2023) (''IEX Letter'') at 3 (stating that there are ''myriad sources of information that . . . market participants draw on to consider how orders are handled and how markets compete with and compare to each other,'' including NYSE TAQ data, other exchange proprietary and consolidated market data, and FINRA's reports on off-exchange trading). *See also, e.g., infra* note 330 (FIF Letter) and accompanying text; notes 113–114 (Professor Christopher Schwarz, University of California Irvine, Professor Brad Barber, University of California, Davis, Professor Xing Huang, Washington University in St. Louis, Professor Philippe Jorion, University of California, Irvine, Professor Terrance Odean, University of California, Berkeley (Feb. 7, 2023) (''Professor Schwarz et al. Letter'')) and accompanying text.

positions, or trading strategies would also mean that the dataset would be substantially dissimilar from the actual data used in the Commission's analysis.

In addition, several commenters suggested a sequencing of the equity market structure proposals, such that the Commission would implement the amendments to Rule 605 and evaluate the execution quality data from the updated reports, before undertaking further action on the remaining equity market structure proposals.[79] One group of members of Congress recommended that no equity market structure rule ''should be finalized or implemented'' until the Commission ''[c]onduct[s] a comprehensive cost-benefit analysis of the aggregate impact of [these rules] and seek[s] public comment on this analysis[,]'' and proposes ''a reasonable, workable, and staggered schedule for public comment on the adoption and implementation of the proposals, considering their overlapping nature, significant compliance and operational burdens, and if they may be insurmountable for smaller or emerging firms.'' [80] As discussed below in the economic analysis, the Commission uses as a baseline the world as it exists today, including adopted rules but not proposed rules.[81] Comments on how the adoption of the Rule 605 amendments should affect the timing or sequence of the other equity market structure proposals will be considered if and when those rules are acted on. Similarly, because the effects of the final rule are measured against the existing regulatory baseline, which does not include rules that have not been adopted, the Commission does not agree that an additional analysis of the aggregate impact of the several equity market structure rules is necessary before the adoption of the Rule 605 amendments.[82]

The proposed amendments to Rule 605, as well as the costs and benefits of the proposed amendments, were detailed in the Proposing Release and received substantial public comment. The proposed amendments to Rule 605 received broad support from many commenters. The Commission has considered the comments received, updated its data analysis where needed, and, in some instances, has modified the proposal in response to comments received.

C. Overview of Final Rule 605

After reviewing the comments received and considering the recommendations from commenters,[83] the Commission has determined to adopt the proposal with several modifications. In some cases, final amendments to Rule 605 add new data elements that provide additional context and information for both the detailed and summary execution quality reports. In adopting the final amendments to Rule 605, the Commission aims to provide individual investors, institutional customers, and broker-dealers with information that they can use to choose market centers or broker-dealers that align with their investment and execution objectives. Further, as with Rule 605 reports prior to these amendments,[84] the Commission anticipates that third parties, such as academics and journalists, will also utilize the reported execution quality data for comparison purposes and analysis of market conditions.

As discussed in section II (Modifications to Reporting Entities) below, the Commission is adopting the amendments to the scope of reporting entities largely as proposed, with a few modifications. The Commission is retaining in the adopted amendments to Rule 605 the proposed requirements that brokers and dealers introducing or carrying 100,000 or more customer accounts prepare Rule 605 reports and that separate reports be prepared for a firm's broker-dealer activity and its market center activity. The Commission is also providing additional explanation of these requirements. The Commission has determined not to require market centers that operate a proposed qualified auction to prepare a separate report for covered orders received for execution in the qualified auction. The Commission is specifying that ATSs must prepare Rule 605 reports separately from their broker-dealer operators as proposed and is also retaining the proposed requirement that a broker-dealer that operates an SDP prepare a separate report for activity specific to the SDP, but with a modified description of what constitutes an SDP.

In addition, as discussed in section III (Modifications to Scope of Orders Covered and Required Information) below, the Commission is adopting amendments to the information required to be reported in the detailed report required by Rule 605(a)(1) with modifications from the proposal. The Commission is adopting amendments to

[79] *See, e.g.,* SIFMA Letter II at 2 (''[o]nce an amended Rule 605 is implemented, the Commission will have the data it needs to fully assess market quality and consider whether additional rulemaking is needed and how any such rulemaking should be designed''); Equity Market Structure Citadel Letter II at 1–3; NYSE, Schwab and Citadel Letter at 1–2; STA Letter at 4; Modern Markets Initiative Letter at 2; Cboe, State Street, et al. Letter dated Mar. 24, 2023 at 1–2; Managed Funds Association Letter at 2; T. Rowe Letter at 3; UBS Letter at 1–2; Virtu Letter II at 2; SIFMA Letter II at 11; Professor Schwarz et al. Letter at 5; and letters from Bill Foster, French Hill, Henry Cuellar, Bill Huizenga, Wiley Nickel, Andy Barr, Ritchie Torres, Ann Wagner, Brittany Pettersen, Dan Meuser, Josh Gottheimer, Mike Flood, Vicente Gonzalez, Byron Donalds, Mike Quigley, Michael V. Lawler, David Scott, Andrew R. Garbarino, Gregory W. Meeks, Monica De La Cruz, Sean Casten, Scott Fitzgerald, Bradley S. Schneider, Erin Houchin, Jim Himes, Young Kim, Steven Horsford, Ralph Norman, Gwen Moore, Tom Emmer, Marc Veasey, and Zach Nunn, United States House of Representatives (Sep. 26, 2023) at 2; Michelle Bryan Oroschakoff, Managing Director and Chief Legal Officer, LPL Financial (Mar. 31, 2023) (''LPL Financial Letter'') at 3–4; Chester Spatt, Pamela R. and Kenneth B. Dunn Professor of Finance, Tepper School, Carnegie Mellon University and former Chief Economist, U.S. Securities and Exchange Commission (2004–2007), Thomas Ernst, Assistant Professor of Finance, Smith School of Business, University of Maryland, Andrey Malenko, Professor of Finance, Carroll School of Management, Boston College, Jian Sun, Assistant Professor of Finance, Le Kong Chian School of Business, Singapore Management University (Nov. 29, 2023) (''Professor Spatt et al. Letter'') at 5; *see also* letter from Patrick McHenry, French Hill, Frank Lucas, Pete Sessions, Bill Posey, Blaine Luetkemeyer, Bill Huizenga, Ann Wagner, Andy Barr, Roger Williams, Tom Emmer, Barry Loudermilk, Alexander X. Mooney, Warren Davidson, John Rose, Bryan Steil, William Timmons, Ralph Norman, Dan Meuser, Scott Fitzgerald, Andrew R. Garbarino, Young Kim, Byron Donalds, Mike Flood, Michael V. Lawler, Zach Nunn, Monica De La Cruz, Erin Houchin, and Andy Ogles, United States House of Representatives (Sept. 26, 2023) (''McHenry et al. Letter'') at 2. *But see* IEX Letter at 5 (''the premise that Rule 605 updates must be a precondition to any other changes looks more like a calculated stall than an argument for careful, reasoned decision making''); letter from Stephen W. Hall, Legal Director and Securities Specialist, Better Markets, Inc. (Oct. 31, 2023) (''Better Markets Letter II'') at 5 (''argument that the Commission should first get more information is a delaying tactic designed to forestall meaningful reforms that are already clearly necessary and appropriate'').

[80] *See* McHenry et al. Letter at 2. As discussed further below, Rule 605 as amended imposes reporting requirements only on market centers and larger broker-dealers that meet the customer account threshold (i.e., introduce or carry at least 100,000 customer accounts) and thus does not bring smaller or emerging firms within scope on the basis of their customer-facing broker-dealer business. The Commission addresses the impact of its rulemaking on smaller or emerging firms in its releases, including this release. *See infra* section IX.D.1.d)(1). Further, the Regulatory Flexibility Act (''RFA'') (5 U.S.C. 601 *et seq.*) requires Federal agencies, in promulgating rules, to consider the impact of those rules on small entities. *See infra* section X for further discussion of the Commission's consideration of the impact of the amendments on small entities.

[81] *See infra* note 981.

[82] *See id.* The Order Competition Rule Proposing Release, the Regulation Best Execution Proposing Release, and the Minimum Pricing Increments Proposing Release mentioned by commenters remain at the proposal stage. To the extent that the Commission takes final action on any or all of those proposals, the baseline in each of those subsequent rulemakings will reflect the regulatory landscape that is current at that time. *See also infra* section IX.C.1.d).

[83] *See, e.g.,* FIF Letter, SIFMA Letter II.

[84] *See, e.g., supra* note 16 (discussing studies by Boehmer et al. and Zhao & Chung).

the scope of covered orders largely as proposed, with changes to the coverage of orders with stop prices. The Commission is also revising the categorization by order size from the proposal to incorporate notional size buckets and whether an order is for less than a share, is an odd-lot, or is a round lot. With respect to the categorization by order type, the Commission is adopting the categorization of executable NMLOs as proposed, but is modifying the categorization of NMLOs priced at or better than the midpoint and adding more categories of immediate-or-cancel orders and more categories related to orders submitted with stop prices. The Commission is also adopting a timestamp convention of at least a millisecond as proposed, but eliminating the proposed statistics for median and 99th percentile time to execution in favor of utilizing more granular time-to-execution buckets. Further, the Commission is adopting the other required statistics for inclusion in the detailed report with several changes from the proposal, including: (1) adding realized spread statistics for more time intervals; (2) calculating effective spread and effective spread divided by quoted spread for marketable order types and NMLOs priced more aggressively than the midpoint only; (3) utilizing spread-based weighting to calculate effective spread divided by quoted spread; (4) adding statistics for average quoted spread, average midpoint, and cumulative notional size; (5) measuring size improvement at time of order receipt rather than time of execution, adding an additional size improvement statistic focused on orders that can receive size improvement, and calculating these size improvement statistics for marketable order types and NMLOs priced more aggressively than the midpoint only; and (6) adding a relative fill rate statistic for NMLOs based on order executions occurring on national securities exchanges.

Further, as discussed in section IV (Summary Execution Quality Report) below, the Commission is adopting a requirement for a summary report pursuant to Rule 605(a)(2), with several changes from the proposal. The Commission is changing the weighting of certain statistics and grouping orders into notional size buckets. The Commission is modifying the required statistics related to average order size in shares; share-weighted average percentage price improvement; and effective spread divided by quoted spread. The Commission is including additional metrics in the summary report for share-weighted average midpoint; share-weighted average notional size; average percentage quoted spread; and average percentage realized spread as calculated at two time horizons. The Commission also is requiring that the summary report be provided in an alternative format.

Finally, as discussed in section V (Requirements for Making Rule 605 Reports Available to the Public) below, the Commission is adopting procedures for making the Rule 605 reports publicly available as proposed.

The Commission endeavors to ensure that investors are provided with timely and accurate information needed to make informed investment decisions, and the final amendments to Rule 605 reflect the Commission's ongoing commitment to enhance transparency for investors. Facilitating the ability of the public to compare and evaluate execution quality among different market centers, brokers, and dealers, is an effective means of reconciling the need to promote both vigorous price competition and fair competition among market centers and broker-dealers, to the benefit of individual investors. Section 11A of the Exchange Act [85] grants the Commission the authority to promulgate rules necessary or appropriate to assure the fairness and usefulness of information on securities transactions [86] and to assure that broker-dealers transmit and direct orders for the purchase or sale of qualified securities in a manner consistent with the establishment and operation of a national market system.[87] By requiring the uniform public disclosure of useful and accessible statistics, amended Rule 605 will better promote competition among market centers and broker-dealers on the basis of execution quality and ultimately improve the efficiency of securities transactions, consistent with the objectives of our national market system.[88]

II. Modifications to Reporting Entities

A. Larger Broker-Dealers

1. Proposed Approach

Prior to the adopted amendments, Rule 605 of Regulation NMS required only market centers, such as national securities exchanges, OTC market makers, and ATSs, to produce publicly available, monthly execution quality reports. The Commission proposed to expand the scope of entities that must prepare Rule 605 reports to include larger broker-dealers that introduce or carry at least 100,000 customer [89] accounts. The Commission reasoned that the proposed expansion would ''improve the usefulness of execution quality statistics, promote fair competition, and enhance transparency by providing investors with information that they could use to compare the execution quality provided by customer-facing broker-dealers.'' [90] As discussed further below, the proposed minimum reporting threshold of 100,000 customers was intended to balance the benefits of having broker-dealers produce execution quality statistics with the costs of implementation and continued reporting.[91]

To implement this proposed expansion, the Commission proposed to insert references to ''brokers'' and ''dealers'' where prior Rule 605 referred to ''market centers.'' [92] In addition, the Commission proposed to revise the definition of ''covered order'' in prior Rule 600(b)(22), which referred to any market order or any limit order (including immediate-or-cancel orders) ''received by a market center,'' [93] to refer to orders ''received by a market center, broker, or dealer.'' [94]

Proposed Rule 605(a)(7) stated that a broker or dealer that is not a market center shall not be subject to the requirements of Rule 605 unless that broker or dealer introduces or carries 100,000 or more customer accounts through which transactions are effected for the purchase or sale of NMS stocks (the ''customer account threshold'').[95] As explained in the Proposing Release, the Commission analyzed available data to determine the proposed customer account threshold given the additional costs that broad expansion of the rule to

[85] 15 U.S.C. 78k–1.

[86] 15 U.S.C. 78k–1(c)(1)(B).

[87] 15 U.S.C. 78k–1(c)(1)(E).

[88] The national market system objectives of section 11A of the Exchange Act include the economically efficient executions of securities transactions; fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets; the availability of information on securities quotations and transactions; and the practicability of brokers executing investor orders in the best market. *See* 15 U.S.C. 78k–1(a)(1)(C).

[89] ''Customer'' means any person that is not a broker or dealer. *See* final 17 CFR 242.600(b)(28).

[90] Proposing Release, 88 FR 3786 at 3795 (Jan. 20, 2023).

[91] *See id.* at 3797.

[92] *See id.* at 3796 (discussing amendments to Rule 605 in proposed Rule 605 introductory text, (a) heading, (a)(1) introductory text, (a)(1)(i)(D), and (a)(3), (4), (5), and (6)).

[93] Prior 17 CFR 242.600(b)(22).

[94] *See* Proposing Release, 88 FR 3786 at 3796 (Jan. 20, 2023); proposed Rule 605(b)(30). The Commission also proposed to require all market centers and broker-dealers that would be subject to Rule 605's reporting requirements to produce summary reports with aggregated execution quality information. *See infra* section IV for further discussion of the summary report.

[95] *See* Proposing Release, 88 FR 3786 at 3797 (Jan. 20, 2023).

broker-dealers would entail.[96] Utilizing a 100,000 customer account threshold as proposed would allow the Rule 605 reporting requirements to capture those broker-dealers that introduce or carry the vast majority of customer accounts, while subjecting only a relatively small percentage of broker-dealers that accept customer orders for execution to the reporting obligation and excluding those broker-dealers that introduce or carry fewer customer accounts.[97]

The proposed customer account threshold also required brokers-dealers to include in their calculations the public customer accounts that they introduce, as well as the customer accounts that they carry.[98] Because an introducing broker-dealer may use an omnibus clearing arrangement and not disclose certain information about its underlying customer accounts to the clearing firm, the Commission proposed that, for purposes of Rule 605, a broker or dealer that utilizes an omnibus clearing arrangement for any of its underlying customer accounts would be considered to carry such underlying customer accounts when calculating the number of customer accounts that it introduces or carries.[99]

Proposed Rule 605(a)(7) stated that any broker or dealer that meets or exceeds the customer account threshold and is also a market center shall produce separate reports pertaining to each function.[100] Further, as proposed a broker-dealer is excluded from Rule 605's reporting requirements only with respect to its customer-facing broker-dealer function (as opposed to its market center function, if applicable) if the number of customer accounts that it introduces or carries is less than the customer account threshold.[101] However, under the proposal, a broker-dealer that meets or exceeds the customer account threshold for the first time has a grace period of three calendar months before being required to comply with Rule 605's reporting requirements.[102]

Prior to the amendments, Rule 605 required that reporting entities calculate certain statistics based on the time of order receipt.[103] Moreover, Regulation NMS defined ''time of order receipt'' based on the time an order was received by a market center for execution.[104] In conjunction with the proposed expansion of Rule 605 to cover larger broker-dealers, the Commission proposed to modify the definition of ''time of order receipt'' to specify that, in the case of a broker or dealer that is not acting as a market center, the time of order receipt is the time that the order was received by the broker or dealer for execution.[105]

[96] *See id.* at 3797, 3886–87.

[97] *See id.* (discussing analysis of the estimated number of broker-dealers that would be subject to Rule 605 reporting requirements according to different definitions of the customer account threshold). *See infra* note 146 and accompanying text for a discussion of an updated analysis.

[98] *See* Proposing Release, 88 FR 3786 at 3797 (Jan. 20, 2023). An introducing broker-dealer is a broker-dealer that has a contractual arrangement with another firm, known as the carrying or clearing firm, under which the clearing/carrying firm agrees to perform certain services for the introducing firm. Usually, the introducing firm transmits its customer accounts and customer orders to the clearing/carrying firm, which executes the orders and carries the account. *See* Securities Exchange Act Release No. 31511 (Nov. 24, 1992), 57 FR 56973 at 56978 (Dec. 2, 1992) (Net Capital Rule). Alternatively, some broker-dealers utilize an ''omnibus clearing arrangement,'' where the clearing firm maintains one account for all customer transactions of the introducing firm, rather than a ''fully disclosed introducing relationship.'' In an omnibus arrangement, the clearing firm does not know the identity of the customers of the introducing firm, whereas in a fully disclosed arrangement, the clearing/carrying firm knows the names, addresses, securities positions, and other relevant data as to each customer. *See id.* at 56978, n.16.

[99] *See* Proposing Release, 88 FR 3786 at 3797–98 (Jan. 20, 2023); proposed Rule 605(a)(7).

[100] *See* Proposing Release, 88 FR 3786 at 3798 (Jan. 20, 2023).

[101] *See id.* at 3798–99. Proposed Rule 605(a)(7) stated that a broker or dealer that meets or exceeds the customer account threshold shall be required to produce reports pursuant to this section for at least three calendar months (''Reporting Period''). *See id.* at 3799. As proposed, the Reporting Period shall begin the first calendar day of the next calendar month after the broker or dealer met or exceeded the customer account threshold, unless it is the first time the broker-dealer had met or exceeded the customer account threshold. *See id.* Any time after a broker or dealer has been required to produce reports pursuant to this proposed section for at least a Reporting Period, if a broker or dealer falls below the customer account threshold, the broker or dealer shall not be required to produce a report pursuant to this paragraph for the next calendar month. *See id.*

[102] *See id.* at 3799. The Commission also proposed that after the three-calendar month grace period, the Reporting Period shall begin on the first calendar day of the fourth calendar month after the broker or dealer has met or exceeded the customer account threshold. *See id.* As proposed, a broker-dealer that crosses the customer account threshold for the first time is required to comply with the reporting requirements of Rule 605 for at least a Reporting Period, even if that broker-dealer falls below the customer account threshold during the grace period. *See id.*

[103] *See, e.g.,* prior 17 CFR 242.605(a)(1)(ii)(D) (measuring, for shares executed with price improvement, the share-weighted average period from the time of order receipt to the time of order execution).

[104] *See* prior 17 CFR 242.600(b)(92). *See also* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75423 (Dec. 1, 2000) (''The definition [of 'time of order receipt'] is intended to identify the time that an order reaches the control of the market center that is expected, at least initially, to execute the order.'').

[105] *See* Proposing Release, 88 FR 3786 at 3799–800 (Jan. 20, 2023); proposed Rule 600(b)(109). The time that the order is received by the market center for execution should be the same as the time that the order is received by the broker-dealer for execution when the broker-dealer also acts as a market center for that order.

2. Final Rule and Discussion

The Commission is adopting amendments to Rule 605 to include larger broker-dealers as proposed and addresses certain commenters' questions below. These amendments will provide enhanced transparency to investors, allowing them to compare and evaluate execution quality among different customer-facing larger broker-dealers and promoting competition among these broker-dealers. As discussed in section II.A.2.a), the Commission is adopting the customer account threshold as proposed. In addition, as discussed in section II.A.2.b), the Commission is adopting as proposed the requirement that larger broker-dealers that are also market centers produce separate reports pertaining to each function. Finally, as discussed in section II.A.2.c), the Commission is adopting as proposed the requirement that all reporting entities, including larger broker-dealers, measure certain statistics from the time of order receipt.

The Commission received comments from a variety of market participants on the proposed expansion to require larger broker-dealers to provide Rule 605 reports. Certain individual investors supported the proposed expansion of publicly available Rule 605 reports to include broker-dealers because this expansion would increase transparency and encourage competition among broker-dealers.[106] One such commenter stated that the proposal would: (1) require broker-dealers to provide more detailed information about the execution quality of their trades, including data on execution speeds, price improvements, and order routing practices, which would help retail investors ''make more informed decisions about where to route our orders and which broker-dealers to work with''; (2) provide more data on execution quality that would ''help level the playing field between individual investors and large institutional players who currently have an information advantage''; and (3) ''encourage broker-dealers to compete on the quality of their executions, which would ultimately benefit all investors.'' [107] Two other individual investors supported the inclusion of broker-dealers and the proposed rule overall, stating that it would ''provide a more detailed and

[106] *See, e.g.,* letters from: Dylan Hodges (Dec. 27, 2022); Edward Murray (Dec. 26, 2022); Dr. Paul Pritchard (Dec. 27, 2022); Cody Welch (Mar. 7, 2023) (''Welch Letter''); Abanes (Mar. 3, 2023) (''Abanes Letter''); Ryan Macarthur (Feb. 24, 2023) (''Macarthur Letter''); David Genco, Jr. (Feb. 24, 2023) (''Genco Letter'').

[107] Letter from Caleb C. (Mar. 18, 2023).

comprehensive standard for broker-dealers to follow, resulting in consistently robust best execution practices.'' [108] In addition, an academic and an individual investor suggested expanding the Rule 605 reporting requirement to include all broker-dealers, rather than just larger broker-dealers.[109]

For reasons similar to those offered by individual investors, financial services firms, industry groups, and a group of academics supported the proposed expansion of Rule 605 reporting requirements to larger broker-dealers.[110] One financial services firm stated that the proposed expansion would ''fill a gap in coverage that currently obscures the order handling practices of many broker-dealers'' because many customer-facing broker-dealers do not meet the definition of a market center and thus do not produce Rule 605 reports.[111] This commenter stated that the customers of these broker-dealers are left without any ''reliable way to evaluate and compare broker-dealer performance.'' [112] A group of academics that authored an academic working paper concerning the execution quality of market orders received from various broker-dealers [113] also submitted a comment letter supporting the proposed expansion and cited the need for improved public transparency based on their research.[114] These commenters stated that, even if retail investors do not pay attention to broker-level disclosures about execution quality if the dollar cost to retail investors is low, such disclosures are likely to be scrutinized by brokers, leading to greater competition and ultimately better execution for retail investors.[115] A broker-dealer supported the proposed expansion to retail brokers, stating that it will make order execution quality, and the marketplace generally, more transparent to retail investors.[116] This commenter also stated that, given the ''highly competitive state of the current retail brokerage market,'' it is not certain that the proposed enhancements to Rule 605 would improve execution quality for individual investors because outcomes for such investors could be ''asymmetric.'' [117] However, this commenter stated that to the extent that there are opportunities to optimize execution quality for individual investors, ''empowering investors to compare execution quality across retail brokers (and consequently to switch brokers based on this information) would be the most efficient and effective way to address these concerns.'' [118]

Some broker-dealers and financial services firms opposed the proposed expansion to include larger broker-dealers, citing costs and the risk of confusion, especially for individual investors.[119] One such broker-dealer stated that retail customers are not asking for or seeking information at the level of granularity required by the proposed rule, stating that the potential risk of investor confusion seems disproportionate to the defined transparency benefits it may provide.[120] Another commenter opposed the proposed expansion because the 605 reports are ''overly complicated for the average investor'' and may give a ''false

[108] Letters from Justin West (Mar. 19, 2023); Ankit (Mar. 19, 2023).

[109] *See* letter from Aswin Joy (Mar. 7, 2023) (''Joy Letter''); letter from James J. Angel, Georgetown University (Mar. 31, 2023) (''Angel Letter'') at 2–3. *See infra* section II.A.2.a) for additional discussion about the scope of the broker-dealer reporting requirement.

[110] *See* Fidelity Letter at 9 (stating that expanding Rule 605 reporting requirements to new entities will provide greater transparency into execution quality differences and increase the ability to measure retail order outcomes in a competitive environment); letter from Gregory Davis, Managing Director and Chief Investment Officer, and Matthew Benchener, Managing Director, Personal Investor, The Vanguard Group, Inc. (Mar. 31, 2023) (''Vanguard Letter'') at 3 (stating that the proposal will increase transparency by empowering investors to compare execution quality across broker-dealers and make more informed decisions about their choice of broker-dealer); Healthy Markets Letter at 16 (stating that Rule 605 reports should cover large brokers that route orders for investors); Better Markets Letter at 5 (stating that the proposed expansion of entities subject to Rule 605 disclosures will help the public compare and evaluate execution quality among different market centers and broker-dealers, and thereby increase transparency of order execution quality, increase information available to both retail and institutional investors, and help promote competition among market centers and broker-dealers); Professor Schwarz et al. Letter at 2; and letter from John L. Thornton, Co-Chair, Hal S. Scott, President, and R. Glenn Hubbard, Co-Chair, Committee on Capital Markets Regulation (Mar. 31, 2023) (''CCMR Letter'') at 14 (stating that the proposed expansion ''will allow retail investors to determine the execution quality of their orders'' and ''would likely enhance competition among retail broker-dealers based on price improvement and overall execution quality'').

[111] *See* Vanguard Letter at 3.

[112] *Id.* at 3–4 (stating that requiring larger broker-dealers to make Rule 605 disclosures would address this coverage gap and give their customers a ''direct line of sight into broker-dealer performance''). *See also* NASAA Letter at 5–6 (stating that the proposed expansion of reporting entities would ''provide the public with a more comprehensive view of order execution quality across the national market system'' and ''allow brokerage customers to compare execution quality among different broker-dealers'').

[113] *See* Proposing Release, 88 FR 3786 at 3832, n.529 (Jan. 20, 2023) and accompanying text (*citing* Christopher Schwarz et al., *The 'Actual Retail Price' of Equity Trades* (Aug. 28, 2022)).

[114] *See* Professor Schwarz et al. Letter at 1–2 (strongly supporting the inclusion of large broker-dealers given their research study finding that shows economically and statistically significant price execution variation across brokers; the level of such differences was previously unknown to retail traders and a large portion of the financial industry). A group consisting of some of these academics submitted another comment letter in which they cited a more recent academic working paper regarding competition among wholesalers and stated that their results ''emphasize the need for further price execution disclosure at the broker level.'' Letter from Xing Huang, Philippe Jorion, and Christopher Schwarz (Dec. 12, 2023) (''Huang et al. Letter'') at 1 (attaching Xing Huang, Philippe Jorion, Jeongmin Lee & Christopher Schwarz, *Who Is Minding the Store? Order Routing and Competition in Retail Trade Execution* (Nov. 19, 2023)).

[115] *See* Professor Schwarz et al. Letter at 3. *See also* Better Markets Letter at 9–10 (stating that even though some retail investors may not read Rule 605 reports, these investors will benefit indirectly by virtue of enhanced disclosure that will ''promote competition, improve regulatory oversight, and facilitate use by third-party researchers and academics'' to expose problematic order routing and execution practices).

[116] *See* Virtu Letter II at 3.

[117] *See id.* at 9. This commenter stated that the proposal ''may lead to changes in the equilibrium mix of customer types at each broker'' because investors would migrate towards brokers that have better execution quality statistics. *See id.* at 9, n.24. This commenter explained that ''order execution quality tends to be inversely related to the aggregate cost to provide liquidity to that broker's customers' orders because market makers are willing to provide more price improvement to orders that are less expensive to service.'' *Id.* This commenter also stated that if the proposal ''induces retail investors with more costly to service orders to move to brokers that previously had less costly to service orders, it could cause execution quality to worsen at the broker with previously less costly to service orders.'' *Id.*

[118] *Id.* at 9.

[119] *See* Robinhood Letter at 41–42 (stating that adding the proposed expansion to include larger broker-dealers is not realistically going to get usable execution quality information in the hands of individual investors because the voluminous data are in a format proven not to be particularly useful for them and that the Commission underestimates the costs for a type of report not generally prepared by broker-dealers that are not also market centers); letter from Seth A. Miller, President Advocacy & Administration, Cambridge Investment Research, Inc. (Mar. 31, 2023) (''Cambridge Letter'') at 7 (stating in its capacity as a broker-dealer and investment adviser that the broad scope of the proposed inclusion of larger retail broker-dealers will impose significant costs and is ''likely to lead to misaligned, misleading comparisons between totally different entities''); Schwab Letter II at 35 (stating that differences in certain execution statistics such as E/Q may be attributable to different business models across firms rather than actual differences in E/Q among comparable business models, and thus would create investor confusion rather than provide useful information); Tastytrade Letter at 4–5 (observing that the proposal will significantly increase the number of reported data points per ticker on approximately 10,000 NMS traded products, and expressing concern about the ability of customers to digest the additional ''confusing and complicated'' data points in Rule 605 reports).

[120] *See* Tastytrade Letter at 4 (''While we agree in general that greater transparency results in a level playing field for retail customers, it seems counterproductive to do so in a manner that risks confusion.'').

sense of comfort'' about order execution practices and quality.[121]

After considering the comments, the Commission is adopting the requirement for broker-dealers that meet the 100,000 customer account threshold to produce Rule 605 reports, as proposed. To implement this requirement, the Commission also is adopting the related amendments to Rules 600 and 605.[122] The Commission agrees with commenters who recognized the need for Rule 605 data pertaining to customer-facing larger broker-dealers. Larger broker-dealer reporting will be useful in increasing the transparency of larger broker-dealers' order execution quality so that investors have information available to compare and evaluate order execution quality and order routing practices among market centers and larger broker-dealers. As discussed further in section II.A.2.a) below, by limiting Rule 605 reporting requirements to larger-broker dealers that meet the customer account threshold only, Rule 605 will balance the benefits of broker-dealer reporting with the costs.

The Commission disagrees with commenters' concerns that larger broker-dealer reporting will be too confusing or misleading to investors, or will create a ''false sense of comfort'' about order execution practices and quality.[123] Individual investor commenters expressed interest in receiving access to execution quality statistics pertaining to larger broker-dealers because this increased transparency would allow individual investors to make more informed decisions and encourage competition among larger broker-dealers.[124] Due to the expansion of Rule 605 reporting requirements to larger broker-dealers, customers of these broker-dealers, including individual investors, and other market participants will no longer need to make inferences about these broker-dealers' execution quality based on a combination of broker-dealers' routing information contained in reports required by Rule 606 and market centers' Rule 605 reports. Instead, customers will be able to use execution quality information contained in larger broker-dealers' Rule 605 reports to make comparisons across these broker-dealers and select those broker-dealers that offer better execution quality. The availability of information about larger broker-dealers' execution quality also is expected to increase the extent to which these broker-dealers compete on the basis of execution quality when making their order routing decisions. Further, to the extent that broker-dealers increase the extent to which they route orders to the market centers offering better execution quality, increased liquidity at those venues may further improve execution quality, as a result of promoting the flow of orders to market centers that offer better execution quality.

The stock-by-stock order execution information that will be provided in the detailed report will allow market participants, including individual investors familiar with data analysis, to make their own determinations about how to group stocks or orders when comparing execution quality information across broker-dealers. However, the Commission is mindful that the detailed report will contain a larger volume of statistical data and many market participants, including individual investors, may not have the means to directly analyze the detailed report. As discussed further below, the Commission is adopting a requirement that every market center, broker, or dealer produce a summary execution quality report in addition to the more detailed report required by Rule 605(a)(1).[125] These summary reports will make available to market participants and other interested parties readily accessible, aggregated data that will allow them to compare some of the more significant aspects of the execution quality provided by specific market centers and larger broker-dealers. These summary reports will provide human-readable information that any investor, including individual investors, can assess without needing technical expertise or relying on an intermediary.[126] Moreover, even individual investors that do not read Rule 605 reports from larger broker-dealers will benefit from independent analysts, consultants, broker-dealers, the financial press, or market centers analyzing and producing more digestible information using Rule 605 data.[127]

One industry group stated that it remains unclear whether broker-dealers' Rule 605 reports would increase competition.[128] This commenter stated its concern that producing Rule 605 statistics without accounting for different broker-dealer business models could lead investors to make incorrect decisions regarding broker-dealer selection.[129] This commenter further stated that differences in execution quality could be the result of a myriad of factors, including ''the customers . . . different brokers serve and the equities the customers trade.'' [130] In response to this commenter, the Commission agrees that, as a result of different business models, a particular broker-dealer's order flow may be made up of a different mixture of securities, order types, and order sizes, which may impact or constrain that broker-dealer's overall execution quality level.[131]

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[121] *See* letter from Kelvin To, Founder and President, Data Boiler Technologies, LLC (Mar. 31, 2023) (''Data Boiler Letter'') at 27–28.

[122] *See* final 17 CFR 242.605(a)(7) (establishing the customer account threshold for larger broker-dealer reporting requirements, production of separate reports, and applicable Reporting Period). *See also* final 17 CFR 242.605 (inserting references to ''brokers'' and ''dealers'' in introductory text, heading for (a), (a)(1) introductory text, (a)(1)(i)(E), and (a)(3), (4), (5), and (6)). *See also* final 17 CFR 242.600(b)(27) (inserting references to orders received by a ''broker'' or ''dealer'' in definition of ''covered order'') and final 17 CFR 242.600(b)(103) (specifying that the definition of ''time of order receipt,'' in the case of a broker or dealer that is not acting as a market center, is the time (at a minimum to the millisecond) that an order was received by the broker or dealer for execution). For further discussion of these amendments, *see* Proposing Release, 88 FR 3786 at 3796, 3798–99 (Jan. 20, 2023).

[123] *See supra* notes 119–121 and accompanying text.

[124] *See supra* notes 106–108 and accompanying text.

[125] *See infra* section IV.B.

[126] *See infra* section IV.B.2. For a discussion of comments regarding investor education or testing related to the summary reports, *see infra* section IV.B.3. As the new Rule 605 requirements, including the expansion of scope to include larger broker-dealers, are implemented, the Commission will consider whether there is a need for additional educational resources to assist investors.

[127] *See infra* notes 1075–1077 and accompanying text (discussing ways in which third parties have used Rule 605 reports to produce information that is meant for public consumption).

[128] *See* SIFMA Letter II at 29.

[129] *See id.* at 30. This commenter also stated it does not understand on what basis the Commission believes that differences in business models are well-known by market participants, and particularly retail investors, for purposes of evaluating execution quality statistics. *See id.* (discussing Proposing Release, 88 FR 3786 at 3800 (Jan. 20, 2023)). However, the Commission's statement in the Proposing Release was made in specific reference to market participants' use of Rule 605 reports to compare a market center and a broker-dealer, rather than use of Rule 605 reports to compare broker-dealers with one another. The Commission agrees with the commenter that differences between broker-dealer business models may not be ex ante well-known to market participants. However, market participants, including individual investors, will be able to use the information in Rule 605 detailed reports and the Rule 605 summary reports to account for differences in broker-dealer order flow, and broker-dealers are not precluded from separately providing their customers with information that can be used to contextualize the information in the Rule 605 reports.

[130] *See id.* at 30 (stating that when pointing to potential shifts in order flow from one broker-dealer to another, the Commission does not account for any potential effects on execution quality caused by the shifting of the order flow itself or the potential for order flow to consolidate among a smaller number of firms, thereby reducing competition and ultimately hurting execution quality).

[131] *See* Proposing Release, 88 FR 3786 at 3831 (Jan. 20, 2023). *See also infra* note 984 for an

However, under these amendments, larger broker-dealers will be required to categorize the execution quality information required by Rule 605 by individual security, different types of orders, and different order sizes. Giving market participants access to this information in Rule 605 reports will help ensure that they are able to control for these differences in order flow characteristics and make apples-to-apples comparisons when assessing and comparing execution quality information across broker-dealers.[132]

An industry group suggested that the Commission allow firms an opportunity to provide a statement in their Rule 605 reports explaining how to contextualize the report based on the nature of the firm's order flow.[133] In addition, a broker-dealer suggested that the Commission permit retail brokers to provide background and contextual information to explain how their obligations are different from those of wholesalers or other market centers that currently report under Rule 605.[134] The Commission is not adopting the suggestion to include a descriptive statement within the Rule 605 reports because it would be inconsistent with the structure of these reports, which are designed to be structured, standardized, machine-readable, quantitative disclosures.[135] As the Commission stated in the original adopting release for Rule 605, Rule 605 is intended to establish a baseline level of disclosure and facilitate cross-market comparisons of execution quality.[136] Similarly, the adopted amendments to Rule 605 provide a baseline level of disclosure that all market centers and larger broker-dealers must meet. Rule 605 does not preclude larger broker-dealers from disclosing additional information concerning their order execution practices that they believe would provide useful context concerning the quality of their services on their websites or through other means of communication.[137]

A broker-dealer recommended that rather than expanding Rule 605 to include larger broker-dealers, the Commission should update Rule 606, which already applies to nonmarket center broker-dealers, to require additional information regarding execution quality.[138] In response to the commenter's suggestion, the Commission considers the inclusion of larger broker-dealers in Rule 605 as adopted to be the preferable option. Although providing Rule 605 data within an expanded version of the existing Rule 606 reports could result in lower compliance costs as a result of broker-dealers' existing experience with preparing and filing Rule 606 reports, many of the costs associated with the initial reporting of execution quality statistics would still be incurred by broker-dealers and therefore broker-dealers would not benefit from a significant reduction in compliance costs overall. Moreover, the format and frequency of the Rule 606 reports differs because the data are more aggregated and the reports are issued quarterly.[139] In contrast, Rule 605 reports are monthly and provide detailed, symbol-by-symbol data that will allow market participants and other users of the report to analyze the data and consider the execution quality that a broker-dealer provides for orders with specific characteristics. Further, while Rule 606 covers all brokers or dealers, subject to a *de minimis* exception, as described below, the customer account threshold will focus the Rule 605 reporting requirement on those larger broker-dealers for which the provision of Rule 605 data will include data for most of the customer accounts handled by broker-dealers and, therefore, will balance the benefits of broker-dealer reporting with the costs of reporting.[140]

(a) Customer Account Threshold

An investor advocacy group and a national securities exchange specifically supported the proposed customer account threshold that would include in scope a broker or dealer that introduces or carries 100,000 or more customer accounts.[141] An academic and an individual investor suggested that all broker-dealers should be required to submit Rule 605 reports.[142] In contrast, a broker-dealer stated that it is not clear why it is necessary to include such a broad scope of larger broker-dealers.[143] According to this commenter, the proposal would require larger retail broker-dealers to produce execution quality reporting and metrics that are identical to those required of securities exchanges and market makers, even if those broker-dealers do not direct client orders.[144]

After considering the comments, the Commission is adopting the 100,000 customer account threshold, as proposed. The Commission's analysis of available data on the number of broker-dealers that will meet the minimum reporting threshold of 100,000 customers confirmed that such threshold will balance the benefits of having broker-dealers produce execution quality statistics with the costs of implementation and continued reporting,[145] given the smaller amount

example of how differences in order flow characteristics may impact inferences about execution quality. For further discussion, *see infra* section IX.C.1.a).

[132] That some of the information contained in the summary execution quality report will be useful for controlling for differences across differences in order flow characteristics of broker-dealer was supported by comment. *See, e.g.,* comments in support of including average notional order size and average realized spreads in the summary reports, discussed in *infra* section IV.B.1.b).

[133] *See* SIFMA Letter II at 31.

[134] *See* Virtu Letter II at 3–4.

[135] *See* Rule 605 NMS Plan at 2 (providing that the detailed report must be in standard, pipe-delimited ASCII format); final 17 CFR 242.605(a)(2) (providing that the summary report must be made available using the most recent version of the schema for CSV format and the associated PDF renderer).

[136] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75419 (Dec. 1, 2000).

[137] Any such statements will be subject to applicable securities laws and regulations.

[138] *See* Robinhood Letter at 42 (''Instead of unnecessarily imposing additional costs on the industry to create new Rule 605 reports that may not have the desired result of empowering investors to analyze broker-dealers' execution quality, the SEC should require broker-dealers that already publish Rule 606 reports . . . to add execution quality statistics to their Rule 606 reports.'').

[139] *See supra* notes 45–51 and accompanying text (discussing Rule 606(a)(1) reports that provide quarterly information about order routing and payment arrangements).

[140] *See infra* section II.A.2.a) (discussing the Commission's analysis to support the adoption of the customer account threshold, which indicates that approximately 85 broker-dealers introduce or carry more than 100,000 customer accounts and these broker-dealers together handle over 98% of customer accounts). *See also infra* section IX.E.5.b) (discussing a reasonable alternative to expand Rule 606 reporting requirements).

[141] *See* Healthy Markets Letter at 16, n.38; Nasdaq Letter at 43 (stating that the proposed customer account threshold ''appears to balance the associated implementation costs on those broker-dealers that may provide the execution quality statistics with the greatest benefit'').

[142] *See* Joy Letter; Angel Letter at 2–3 (stating that all broker-dealers should be required to show execution quality information, and that CAT could easily produce Rule 605 reports at low incremental cost). *See also* Robinhood Letter at 44–45 (recommending that, if the Commission decides to proceed with the proposed rule, it should require all broker-dealers to report under Rule 605, because the number of large broker-dealers is relatively small (6.7% of all broker-dealers); the limited application of the rule would create an information gap about execution quality for investors that use smaller broker-dealers and new retail broker entrants). With respect to the commenter's suggestion that CAT data could be used to produce Rule 605 reports, *see infra* section V.B.2.b) for a discussion of the potential alternative to generate order execution quality reports using CAT data.

[143] *See* Cambridge Letter at 7 (''such breadth cannot be justified in light of the likely significant costs to be imposed on certain participants'').

[144] *See id.*

[145] *See infra* section IX.D.2.a)(1) for a discussion of the costs related to expanding the scope of Rule 605 reporting entities. As discussed further below, broker-dealers that were not previously required to publish Rule 605 reports will incur initial costs to prepare and post Rule 605 reports for the first time, which may include developing any policies and procedures that may be needed to do so, and all

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of benefits relative to costs that there would be if the Rule 605 reporting requirements extended to broker-dealers that introduce or carry a smaller number of customer accounts. Specifically, this analysis indicates that approximately 85 broker-dealers introduce or carry more than 100,000 customer accounts and these broker-dealers together handle over 98% of customer accounts.[146] The Commission is not subjecting all broker-dealers to Rule 605 reporting requirements, as suggested by certain commenters, because of the lower benefits relative to costs for broker-dealers with a smaller number of customer accounts.[147] Conversely, the Commission disagrees with the commenter that states that the scope of larger broker-dealers that will be required to provide Rule 605 reports is overbroad.[148] The relative market-wide benefit of having a broker-dealer prepare Rule 605 reports increases when the broker-dealer has more customers.[149] The Commission's updated analysis indicates that utilizing a lower customer account threshold, such as 10,000 customer accounts, would nearly triple both initial and ongoing costs for non-market center broker-dealers (which are not otherwise subject to Rule 605's reporting requirements) and yet would result in capturing only modestly more customer accounts than the 100,000 customer account threshold.[150] The Commission's updated analysis also indicates that utilizing a higher customer account threshold, such as 250,000 customer accounts, would lower costs but also decrease coverage of customer accounts and customer order originations.[151] Thus, utilizing 100,000 customer accounts as the adopted minimum reporting threshold will better balance the benefits of having broker-dealers produce execution quality statistics with the costs of implementation and reporting.

The customer account threshold will require brokers-dealers to include in their calculations the customer accounts that they introduce, as well as the customer accounts that they carry. Rule 605 reports that reflect orders received from customer accounts that a broker-dealer introduces or carries will provide useful information to market participants because both introducing and carrying broker-dealers make decisions about where to route those orders and it will be helpful for customers to be able to evaluate the execution quality received as a result of those decisions.

One industry group requested an exception from the Rule 605 reporting requirement for an introducing firm that routes all of its customer orders to its clearing firm, on a non-directed basis, where the clearing firm makes all routing decisions and the introducing firm does not receive payment for order flow (''PFOF'').[152] This commenter explained that its request would reduce the reporting burden for smaller introducing firms.[153] This commenter stated that, given its suggested conditions for the exception from reporting requirements that an introducing broker would be required to examine the clearing firm's Rule 605 report and not have reason to believe the clearing firm's report materially misrepresents the introducing broker's order flow, the quality of the disclosure should not be impacted.[154] A second industry group made a similar request for an exception from reporting for certain introducing broker-dealers, stating that when introducing broker-dealers send customer orders to a clearing broker that makes the routing decisions, the introducing broker may not be in the best position to generate Rule 605 reports.[155]

The Commission considered these commenters' suggestion that Rule 605 provide an exception for certain introducing broker-dealers, but is not adopting the suggested exception for the following reasons: (1) Rule 605 reports prepared by larger broker-dealers will provide market participants and other interested parties with information relevant to evaluating how relationships among broker-dealers may affect execution quality, and the payment of PFOF is not the only circumstance that leads to conflicted relationships between an introducing broker-dealer and its customers; [156] (2) an introducing firm would not be able to determine whether or not its clearing firm's Rule 605 report materially misrepresents the introducing firm's order flow without independently calculating its own execution quality statistics, and if the introducing firm needed to make these calculations to do this assessment, then any additional burden due to the requirement to prepare Rule 605 reports will be minimal; (3) different firms

broker-dealers will face ongoing costs to continue to prepare the reports each month. *See also infra* section IX.E.1.a) for a discussion about the estimated costs of utilizing a different number of customer accounts as the minimum reporting threshold.

[146] Analysis from the Proposing Release was repeated regarding the estimated number of broker-dealers that will be subject to Rule 605 reporting requirements according to different definitions of the customer account threshold. *See* Proposing Release, 88 FR 3786 at 3886–87 (Jan. 20, 2023). For a description of how this analysis differs from the analysis in the Proposing Release, *see infra* note 1747. This updated analysis indicates that approximately 85 broker-dealers (or approximately 6.7% of customer-carrying broker-dealers) introduce or carry more than 100,000 customer accounts and these broker-dealers together handle over 98% of customer accounts. *See infra* Table 13 for a cost-benefit analysis of different customer account thresholds that could be used to define ''larger broker-dealer'' and accompanying text for methodology. For example, approximately 244 broker-dealers introduce or carry more than 10,000 customer accounts and these broker-dealers together handle over 99% of customer accounts. Further, approximately 1,245 broker-dealers introduce or carry at least 1 customer account.

[147] *See infra* section IX.E.1.a) (reducing the customer account threshold from 100,000 to 10,000 would almost triple both initial and ongoing costs); *see also infra* section IX.E.1.b) (discussing the alternative of requiring all broker-dealers to prepare Rule 605 reports).

[148] *See supra* notes 143–144 and accompanying text. It is unclear, and the commenter does not explain, why any of the required execution quality metrics will not be appropriate for reporting by a larger broker-dealer and the commenter does not suggest any alternative metrics. It is also unclear, and the commenter does not explain, how a Rule 605 report prepared by a retail broker will be less useful if the retail broker did not direct client orders. Even though the same underlying order may be reflected on multiple Rule 605 reports, the aggregated statistics within each report will provide different views of execution quality specific to the group of orders received by each reporting entity. Thus, a Rule 605 report prepared by a retail broker will allow that retail broker's customers, as well as other market participants, to view the execution quality specific to those orders received by the specific retail broker.

[149] *See* Proposing Release, 88 FR 3786 at 3797, n.167 (Jan. 20, 2023) and accompanying text (discussing potential initial and ongoing costs that broker-dealers would incur as a result of the proposed amendments to Rule 605).

[150] *See infra* section IX.E.1.a) and Table 13 (demonstrating that, for example, reducing the customer account threshold from 100,000 to 10,000 would increase estimated initial and ongoing compliance costs from about $3.4 million and $4.4 million, respectively, to about $9.8 million and $12.6 million, respectively, while increasing the coverage of customer accounts by 1.4% and the coverage of customer order originations by 21%). *See also infra* notes 1749–1751 (discussing why lowering the customer account threshold to include these customers might not be particularly beneficial).

[151] *See* Table 13 (demonstrating that raising the customer account threshold to 250,000 would lower estimated initial and ongoing compliance costs to about $2.4 million and $3.1 million, respectively, while decreasing the coverage of customer accounts by 1.1% and the coverage of customer order originations by 55.7%).

[152] *See* FIF Letter at 6.

[153] *See* FIF Letter II at 2.

[154] *See id.*

[155] *See* letter from William C. Thum, Managing Director and Assistant General Counsel, SIFMA AMG (Mar. 31, 2023) (''SIFMA AMG Letter'') at 6.

[156] For instance, retail brokers potentially face conflicts of interest when making order routing decisions, including whether to route to a particular wholesaler. *See infra* section IX.C.4.a)(2). As an example, broker-dealers face conflicts of interest when making routing decisions due to their own affiliation with market centers (*e.g.,* if the broker-dealer operates its own ATS), from the presence of liquidity fees and rebates on some market centers, or from payments that some retail brokers receive from wholesalers to attract the order flow of their individual investor customers (*i.e.,* PFOF). *See infra* notes 1300–1304 and accompanying text.

could have differing interpretations of how much variation there could be in execution quality statistics between an introducing firm and its clearing firm before the clearing firm's Rule 605 report would ''materially misrepresent'' the introducing firm's order flow; and (4) even if an introducing firm determined that it has no reason to believe that its clearing firm's Rule 605 report materially misrepresents the introducing firm's order flow, the introducing firm's customers could consider certain differences between the execution quality statistics of the introducing firm and its clearing firm to be meaningful.[157]

An industry group asked for clarification regarding how firms would calculate their number of customer accounts for purposes of the customer account threshold.[158] In response, the Commission is providing the following guidance. First, the introducing broker-dealer generally should only count the institutional top-level account when an introducing broker-dealer that is not a clearing broker-dealer establishes a top-level account for an institutional asset manager.[159] The Commission recognizes that in such instances the introducing broker-dealer often utilizes an omnibus clearing arrangement and thus does not have specific knowledge of how many underlying accounts a top-level account may represent.[160] Second, broker-dealers generally should count and only count the accounts for all of their customers that are authorized by their broker-dealers to trade NMS stocks, including non-U.S. customers. A focus on customers that are authorized to trade NMS stocks generally should align with the scope of Rule 605 reports because these reports relate to covered orders in NMS stocks.[161] Third, broker-dealers that provide routing services for other broker-dealers could have customer accounts for that portion of their business and the routing broker-dealer generally should consider whether a top-level account pertains to customer orders and count only those top-level accounts that the routing broker-dealer introduces or carries that are associated with customer orders. Fourth, broker-dealers generally should count only active customer accounts. Broker-dealers generally should consider customer accounts as active in the same manner as defined and reported in their Financial and Operational Combined Uniform Single (''FOCUS'') Reports on Form X–17A–5.[162] Consistent with their FOCUS reports, larger broker-dealers reporting under Rule 605 generally should count only active accounts that have a non-zero cash or securities balance at the end of the reporting period. Leveraging an existing classification of active accounts in these FOCUS reports generally should facilitate the identification of inactive accounts.

(b) Production of Separate Reports

Two investor advocacy groups expressed their support for the proposed requirement that larger broker-dealers that are also market centers produce separate reports for each activity.[163]

After considering the comments, the Commission is adopting the requirement that larger broker-dealers that are also market centers produce separate reports pertaining to each function, as proposed. As explained in the Proposing Release, requiring a firm to produce separate reports pertaining to its market center function and its broker-dealer function will allow market participants and other interested parties to view the firm's execution quality from the perspective of how it operates in each of these separate roles.[164]

An industry group stated that the proposed distinction between broker-dealer activity and market center activity in Rule 605 reports requires clarification and asked specific questions to clarify this distinction for purposes of grouping orders to prepare the separate reports.[165] In response, the Commission provides the following clarifications. First, a firm that is an OTC market maker and introduces or carries over 100,000 customer accounts (*i.e.,* meets the customer account threshold for larger broker-dealers) generally should include in its Rule 605 report pertaining to its broker-dealer function all covered orders in NMS stocks that the firm's broker-dealer received for execution as part of its customer-facing line of business. The firm generally should include in its Rule 605 report pertaining to its market center function all covered orders in NMS stock that the firm received for execution that are the type of order for which the firm serves as an OTC market maker. The set of orders pertaining to a firm's broker-dealer function may overlap with the set of orders pertaining to its market center function. The firm generally should include an order in both of its Rule 605 reports if its broker-dealer received the order from a customer and the firm also acts as a market center for that type of order.

Second, a firm that engages in a mixed capacity trade (*i.e.,* a trade involving both a portion executed as agent and a portion executed as principal) generally should include in its Rule 605 report pertaining to its broker-dealer function the entire covered order that it received for execution as part of its customer-facing line of business and subsequently executed in a mixed capacity. Based on

[157] In some instances, the same underlying order may be reflected on the Rule 605 reports provided by both an introducing firm and its clearing firm, but the separate reports will provide different views of execution quality specific to the group of orders handled by each broker-dealer. *See also* Proposing Release, 98 FR 3786 at 3798 (Jan. 20, 2023).

[158] *See* FIF Letter at 5–6 (requesting clarifications on how a firm would calculate its number of accounts to determine whether it meets the customer account threshold in the following circumstances: (1) an introducing firm that is not a clearing firm, where the introducing firm establishes a top-level trading account for an institutional asset manager and the asset manager allocates trade executions to sub-accounts; (2) a firm that has accounts for non-U.S. customers; (3) a firm that provides routing services for other broker-dealers; and (4) a firm that has authorized an account to trade NMS stocks but that account has never traded an NMS stock or has not traded an NMS stock for an extended period of time).

[159] In this scenario as presented by the commenter, the asset manager submits orders using this top-level account and separately establishes multiple underlying accounts with the clearing broker-dealer to allocate trades post-execution. *See id.* at 5–6.

[160] *See supra* note 98 and accompanying text (discussing omnibus clearing arrangements in which the clearing firm does not know the identity of the customers of the introducing firm). Having an introducing broker-dealer count the top-level account through which trading occurs is consistent with the approach for reporting transactions to the CAT. *See* FINRA CAT FAQ M4, *available at https://catnmsplan.com/faq* (stating that in scenarios involving managed accounts where an order may be placed in a master account with subaccount allocations made at a later time, the identifier representing the master/top account should be reported to CAT for transaction events requiring such identifier).

[161] *See* final 17 CFR 242.605(a)(1); final 17 CFR 242.605(a)(7).

[162] *See* Instructions to FOCUS Report—Form X–17A–5 at 2.

[163] *See* Healthy Markets Letter at 16 (''[B]rokers that are also market centers (including as OTC market makers) should be required to separately report their market center functions for all covered orders (*e.g.,* ATS or SDP operations).''); Better Markets Letter at 5, n.12.

[164] *See* Proposing Release, 88 FR 3786 at 3798 (Jan. 20, 2023).

[165] *See* SIFMA Letter II at 28 (asking the following questions as to how a firm should group different transactions for Rule 605 separate reports: (1) ''If a firm is an OTC market maker and introduces or carries 100,000+ customer accounts, how should the firm determine which orders to report as broker-dealer trades versus those executed as a market center?''; (2) ''If a firm engages in a mixed capacity trade involving both a portion executed as agent and a portion executed as principal, would this order need to be bifurcated between the two reports?''; (3) ''If a firm trades in a riskless principal capacity, but the transaction was part of its internal broker-dealer business and not its OTC market making business, should the firm nonetheless attribute the riskless principal trade to its market center Rule 605 report? The Commission only discusses a market center engaging in riskless principal transactions, but it seems possible that a non-market center might transact on a riskless principal basis as well.'').

the firm's execution of a portion of the order as principal, as a general matter, the firm acts as an OTC market maker for that type of order and, because an OTC market maker falls within the definition of a ''market center,'' [166] that portion of the order generally should be included in its report pertaining to its market center function. The firm's execution of a portion of the order as agent generally should not be determinative of whether the firm acts as an OTC market maker for that type of order. The firm also generally should include in its Rule 605 report pertaining to its market center function the portion of the covered order that it executed as agent if it received the order for execution as an OTC market maker.[167] Whether the firm received the entire covered order in its capacity as an OTC market maker (and thus as market center) or only a portion of the order in its capacity as an OTC market maker generally will depend on the types of orders for which it acts as an OTC market maker.[168]

Third, a firm that trades in a riskless principal capacity with respect to a transaction handled by its non-market center, internal broker-dealer business rather than its OTC market making business generally should not need to include the transaction in its Rule 605 report pertaining to its market center function because this division of business lines suggests that the firm is acting in its capacity as a broker-dealer only. However, the firm generally should evaluate whether or not it acts as an OTC market maker in connection with its internal broker-dealer business, in which case that portion of the business may be a market center and thus be required to be reported as such.

A financial services firm requested clarification of whether a broker-dealer that principally facilitates the trading of fractional shares must publish a separate Rule 605 report as a market center.[169] In response, the Commission clarifies that under the adopted amendments to Rule 605 a reporting entity must produce a separate Rule 605 report as a market center if it meets the definition of an ''OTC market maker'' and receives ''covered orders'' for execution in such capacity.[170] As stated in the Proposing Release, as a general matter, a broker-dealer generally should categorize a customer's submitted order for an NMS stock, whether it be for a fractional share, whole shares, or whole shares with a fractional share component, as a ''held'' order (and thus a covered order) if the customer reasonably expects its broker-dealer to attempt to execute such order immediately.[171]

One group of academics suggested that the Commission require separate disclosures for each account type at each broker-dealer to reflect the observation that execution quality differs across platforms with different commission and PFOF structures.[172] A group consisting of some of these academics also suggested that the Commission require separate disclosures of specific ''broker-wholesaler pairs'' consisting of a broker-dealer and each wholesaler to which the broker-dealer routes orders from retail investors.[173] A broker-dealer stated that execution quality metrics, including the proposed summary reports, would be more informative if Rule 605 reports differentiated between retail investors and professional customers because the nature of order flow and resulting execution quality may be quite different.[174] Another broker-dealer stated that ''each firm's order flow is unique'' and suggested that the Commission ''consider the balance of this additional transparency of order flow'' both: (1) ''in the context of reporting fragmentation for trading venues that have built in segmentation (*i.e.,* ATS with multiple pools or an exchange that has a continuous order book and a retail price improvement order book)''; and (2) ''in the context of retail brokers where experience may be materially different within a broker-dealer (*i.e.,* a retail broker chooses to offer retail customers different experiences within the same broker-dealer).''

The Commission is not adopting these commenters' suggestions that larger broker-dealers be required to produce multiple reports that differentiate between account types, business segments, or routing destinations. Requiring larger broker-dealers to split their orders amongst multiple Rule 605 reports pertaining to their broker-dealer function would create additional implementation costs and potentially undercut the goal of having standardized reports that are comparable across entities. For instance, differences among how firms structure different business lines would pose challenges in ensuring that each firm is capturing order flow with similar characteristics in the same way, which could impede the comparability of reports.

(c) Time of Order Receipt

One investor advocacy group stated that broker-dealers should be required to calculate time of order receipt based on when that broker-dealer received the

[166] *See* final 17 CFR 242.600(b)(55).

[167] When a market center, broker, or dealer receives a covered order for execution, it may execute in part at the receiving market center, broker, or dealer and in part at an away venue, but the entire covered order will be included in the firm's Rule 605 report. *See* final 17 CFR 242.605(a)(1)(i)(E) (requiring a market center, broker, or dealer to report the cumulative number of shares of covered orders executed at the receiving market center, broker, or dealer, excluding shares executed on a riskless principal basis) and final 17 CFR 242.605(a)(1)(i)(F) (requiring a market center, broker, or dealer to report the cumulative number of shares of covered orders executed at any other venue).

[168] The Commission agrees with the previous guidance provided by the staff that the Rule 605 reporting requirement for market centers generally should apply to broker-dealers insofar as they act as a market center with respect to orders received from other persons. *See* Proposing Release, 88 FR 3786 at 3798, n.180 (Jan. 20, 2023) (*citing* Division of Market Regulation: Staff Legal Bulletin No. 12R (Revised), Question 4 (June 22, 2001), *available at https://www.sec.gov/interps/legal/slbim12a.htm*). The Commission provides the following example to illustrate. Assume that Firm A generally acts as an OTC market maker for XYZ stock. If Firm A receives an order for 100 shares of XYZ stock, it may choose to execute as principal 50 shares of XYZ stock that it holds in inventory and execute as agent the 50 shares of XYZ stock necessary to fill the entire order. Firm A generally would have received the entire 100-share order in its capacity as an OTC market maker, notwithstanding its execution of a portion of the order as agent. In contrast, Firm B acts as an OTC market maker for XYZ stock but not ABC stock. If Firm B receives an order for 50 shares of XYZ stock and an order for 50 shares of ABC stock, Firm B generally would have received the order for 50 shares of XYZ stock in its capacity as an OTC market maker, regardless of whether it executed those shares as principal or as agent. In this scenario, Firm B generally would not have received the order for 50 shares of ABC stock in its capacity as an OTC market maker and therefore generally would have received this order in connection with its broker-dealer function only.

[169] *See* Fidelity Letter at 9–10.

[170] *See supra* note 3 for the definition of ''OTC market maker.'' The term ''covered order'' is defined in final 17 CFR 242.600(b)(27). As discussed above, a firm may act as an OTC market maker for certain types of orders only. For example, Firm C acts as an OTC market maker for fractional shares only. If Firm C receives an order for 51.25 shares of XYZ stock, it may execute as principal 0.25 shares of XYZ stock and execute as agent 51 shares of XYZ stock. Firm B generally would have received only the fractional share component of the order (*i.e.,* 0.25 shares) in its capacity as an OTC market maker and therefore only the fractional share component generally should be included in Firm C's Rule 605 report pertaining to its market center function.

[171] *See* Proposing Release, 88 FR 3786 at 3789, n.36 (Jan. 20, 2023).

[172] *See* Professor Schwarz et al. Letter at 5. *See also* Better Markets Letter at 5, n.14 (agreeing with this recommendation).

[173] *See* Huang et al. Letter at 1 (''[O]ur results suggest that disclosures for each broker-wholesaler pair should provide additional helpful information to monitor broker and wholesaler performance. This would allow within-broker comparisons of execution quality that are more meaningful than comparisons solely across brokers.'').

[174] *See* Rule 605 Citadel Letter at 8 (recommending that the Commission engage with market participants to appropriately define a retail order, such as by reference to an order or trade threshold and stating that forty trades per day would be inappropriately high).

order because, in the commenter's view, the use of the time the order was received would show if there are order-delays and thereby provide a useful metric for anyone examining order-routing latency across brokers.[175] An industry group and a financial services firm suggested instead of the proposed rule text that broker-dealers should be required to calculate time of order receipt based on the time that the broker-dealer first routes the order.[176] The industry group questioned whether execution metrics should be measured before or after the broker-dealer has applied risk controls and decided whether to reject the order.[177] This commenter stated that current order management systems may not generate a timestamp for when risk controls have been applied and it would be costly to generate such markers.[178] For this reason, this commenter suggested permitting a routing firm to use the time of its first route as the time of order receipt and stated that the time of first route would be consistent with the Staff frequently asked questions (FAQs) regarding Rule 606.[179] The financial services firm stated that Rule 605 reports for a non-market center should use the time of order routing, not the time of order receipt, because broker-dealers perform necessary review activities following receipt of the order but prior to routing the order.[180]

After consideration of comments, the Commission is adopting the requirement that larger broker-dealers calculate time of order receipt based on the time that they received the initial order, as proposed.[181] Time of order receipt, rather than order route time, is more relevant to customers of a broker-dealer because it will show how the broker-dealer handled the order from the time of receipt by the broker-dealer. Time of order receipt will show any delays in executing the order, and any resulting consequences on the execution quality the broker-dealer obtained for that order, because the execution quality statistics will be measured based on the prevailing market prices at the time the order was received. In addition, counting time of order receipt from the time that a broker-dealer initially receives the order will allow broker-dealers to assign a time of order receipt in a prompt and uniform manner and thus help to ensure that the time of order receipt is assigned in a non-manipulatory manner.[182]

A financial services firm that suggested the use of order route time stated that larger share orders are more likely to be sent to a review queue and could have a ''disproportionate negative impact'' on average execution speed.[183] This commenter further stated that, ''[c]onsequently, using order receipt time could create a perverse incentive for firms to diminish time spent on necessary reviews in an effort to improve execution speed statistics.'' [184] The Commission disagrees that broker-dealers will be incentivized to circumvent their risk controls because time-to-execution statistics take into account the period during which a broker-dealer is performing various reviews and before the broker-dealer routes an order. Broker-dealers have multiple reasons to implement risk controls upon the receipt of customer orders. For example, broker-dealers are subject to other regulatory requirements, including the Commission's market access rule, that will continue to apply.[185] The existence of such requirements means that broker-dealers will continue to utilize risk controls necessary to comply with these requirements, including risk controls implemented to comply with the market access rule, because the potential consequences of failing to comply with these requirements likely would counterbalance any perceived benefits of being able to report faster execution times. Broker-dealers also have reputational and business concerns that serve as additional incentives to continue to apply risk controls. Further, to the extent that larger orders received by broker-dealers may result in slower execution times due to the application of risk controls, measuring time to execution at the time of order receipt may motivate broker-dealers to make their risk controls more efficient. Moreover, time-to-execution statistics are only one aspect of execution quality statistics and price-based execution quality statistics will provide a different dimension of the reporting firms' execution quality.

An industry group requested confirmation that orders rejected based on the application of risk and compliance controls would not count as having been received for purposes of Rule 605 reporting.[186] In response, the Commission confirms that a broker-dealer generally should not include orders rejected based on the application of risk and compliance controls within its Rule 605 reports. Including these rejected orders in Rule 605 reports would not provide data useful to understanding the execution quality provided by the reporting broker-dealer because these orders would not have been received by the firm in a form where execution was possible. Thus, these rejected orders generally should not be treated as ''received'' by the broker-dealer for Rule 605 reporting purposes.

B. Qualified Auction Mechanisms

1. Proposed Approach

In today's equity markets, retail brokers often identify and route the marketable orders of individual investors in NMS stocks to wholesalers and the wholesalers often internalize these orders.[187] At the same time that the Commission proposed the amendments to Rule 605 discussed herein, the Commission separately proposed rules that generally would require that individual investor orders be exposed to order-by-order competition in fair and open auctions designed to obtain the best prices before such orders could be internalized by wholesalers or any other type of trading center that restricts order-by-order competition.[188] The proposal focused on the treatment of segmented orders, which the Commission proposed to define as an order for an NMS stock that

[175] *See* Healthy Markets at 16–17.

[176] *See* FIF Letter at 18–19; Schwab Letter II at 33; letter from Jason Clague, Managing Director, Head of Operations, The Charles Schwab Corporation (Sep. 28, 2023) (''Schwab Letter III'') at 5.

[177] *See* FIF Letter at 19.

[178] *See id.*

[179] *See id.* (*citing* Rule 606 Staff FAQs, FAQ 11.01). Rule 606 Staff FAQs are available at: *https://www.sec.gov/tm/faq-rule-606-regulation-nms.* Staff reports, Investor Bulletins, and other staff documents (included those cited herein) represent the views of Commission staff and are not a rule, regulation, or statement of the Commission. The Commission has neither approved nor disapproved the content of these staff documents and, like all staff documents, they have no legal force or effect, do not alter or amend the applicable law, and create no new or additional obligations for any person.

[180] *See* Schwab Letter II at 33; Schwab Letter III at 5 (''The use of order receipt time rather than route time would result in some execution quality statistics like execution speed not being fairly represented in the reports due to outliers caused by market access review activities.'').

[181] *See* final 17 CFR 242.600(b)(103).

[182] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75423 (Dec. 1, 2000) (discussing a commenter's concern that a market center might attempt to manipulate the time of receipt for its order flow by, for example, monitoring market movements before and/or after receipt of any order and assigning the NBBO that is most favorable to them during that brief option period).

[183] *See* Schwab Letter II at 33; Schwab Letter III at 5.

[184] Schwab Letter II at 33; Schwab Letter III at 5.

[185] *See* 17 CFR 240.15c3–5.

[186] *See* FIF Letter at 19.

[187] This practice of separately identifying and routing the marketable orders of individual investors to wholesalers is a form of ''segmentation.''

[188] For a full description and discussion of the order competition rule proposal, *see* Order Competition Rule Proposing Release, 88 FR 128 (Jan. 3, 2023); proposed 17 CFR 242.615 (''Rule 615'').

is for an account that is: (1) of a natural person or an account held in legal form on behalf of a natural person or group of related family members; and (2) in which the average daily number of trades executed in NMS stocks was less than 40 in each of the six preceding calendar months.[189] The intent of the proposed definition was to encompass the marketable orders of individual investors that retail brokers currently route to wholesalers for handling and execution.[190] Under those proposed rules, a ''restricted competition trading center'' would not be allowed to execute internally a segmented order for an NMS stock until after a broker or dealer has exposed such order to competition at a specified limit price in a ''qualified auction'' that met certain requirements and was operated by an ''open competition trading center.'' [191]

If the Commission adopts the order competition rule proposal, a national securities exchange or NMS Stock ATS that serves as an open competition trading center and is required to prepare execution quality reports under Rule 605 would be required to include covered orders that it received for execution in a qualified auction within its blended execution quality statistics. Because of concerns that differences in execution quality for orders executed within proposed qualified auctions as compared to orders executed outside of these qualified auctions would not be apparent in blended execution quality statistics, the Commission proposed to amend Rule 605(a)(1) to state that market centers that operate a qualified auction must prepare a separate report under Rule 605 pertaining only to covered orders that the market center receives for execution in a qualified auction.[192]

2. Final Rule and Discussion

In this release, the Commission is not acting on the proposal to require separate Rule 605 reports for orders that a market center receives for execution from a qualified auction. The Commission received generally supportive comments from a variety of market participants, including individual investors, on this proposed amendment.[193] Some industry commenters suggested that Rule 605 reports should distinguish between segmented and non-segmented orders, as described in the Order Competition Rule Proposing Release.[194]

The Commission is still considering the order competition rule proposal and the proposal to require separate Rule 605 reports for orders that a market center receives for execution in a qualified auction. Therefore, the qualified auctions contemplated by the Order Competition Rule Proposing Release do not exist as a place of execution at this time. Accordingly, in this release, the Commission is not acting on the proposed separate Rule 605 reporting requirement for orders a market center receives for execution in a qualified auction.

C. NMS Stock ATSs and SDPs

1. Proposed Approach

Under Rule 605 prior to the amendments, firms that operate two separate markets must prepare separate Rule 605 reports for each market center.[195] This requirement allows market participants to assess the execution quality of each market individually and prevents differences in the nature of each market from obscuring information about execution quality. The Commission proposed to specify in Rule 605(a)(1) that an NMS Stock ATS (as defined in Regulation ATS) [196] shall prepare reports separately from their broker-dealer operators to the extent such entities are required to prepare reports.[197] The Commission also proposed to require in Rule 605(a)(1) that any market center that provides a separate routing destination that allows persons to enter orders for execution against the bids and offers of a single dealer shall produce a separate report pertaining only to covered orders submitted to such routing destination.[198] This provision would have covered an SDP operated by a broker-dealer and required a separate report pertaining to those orders submitted to the SDP, allowing customers and other market participants to distinguish SDP activity from more traditional dealer activity.[199]

2. Final Rule and Discussion

The Commission is specifying that NMS Stock ATSs must report separately from their broker-dealer operators, as proposed, and adopting a separate reporting requirement for SDPs largely as proposed. In each instance, separate reporting under Rule 605 will bring transparency to these segments of the OTC equity market.

The Commission received generally supportive comments from a variety of market participants regarding having firms produce separate Rule 605 reports for NMS Stock ATSs and for SDPs.[200] After considering the comments, and for the reasons discussed in the Proposing Release, the Commission is specifying

[189] *See* Order Competition Rule Proposing Release, 88 FR 128 at 149 (Jan. 3, 2023); proposed Rule 600(b)(91) (defining ''segmented order'').

[190] *See* Order Competition Rule Proposing Release, 88 FR 128 at 149 (Jan. 3, 2023).

[191] *See id.* at 243; proposed Rule 600(b)(87) (defining ''restricted competition trading center''); proposed Rule 615(a) (describing the order competition requirement). An ''open competition trading center'' would be a national securities exchange or NMS Stock ATS that meets certain requirements, including being transparent and having a substantial trading volume in NMS stocks independent of qualified auctions. *See* Order Competition Rule Proposing Release, 88 FR 128 at 243 (Jan. 3, 2023); proposed Rule 600(b)(64) (defining ''open competition trading center''). A ''qualified auction'' would be an auction operated by an open competition trading center pursuant to specified requirements that are designed to achieve competition. *See* Order Competition Rule Proposing Release, 88 FR 128 at 243 (Jan. 3, 2023); proposed Rule 600(b)(81) (defining ''qualified auction''); proposed Rule 615(c) (setting forth requirements for operation of a qualified auction).

[192] *See* Proposing Release, 88 FR 3786 at 3802 (Jan. 20, 2023).

[193] *See, e.g.,* Joy Letter; Pritchard Letter; and letters from Julio Cesar (Feb. 24, 2023) (''Cesar Letter''); Nevin Varghese (Dec. 26, 2022) (''Varghese Letter'').

[194] *See* FIF Letter at 13 (stating that segmented orders would likely need to be separate from non-segmented orders); Fidelity Letter at 9 (recommending that the Commission distinguish Rule 605 data by segmented and non-segmented order flow and display such orders separately in detailed reports and summary reports); SIFMA Letter II at 29 (stating that it is unclear why retail broker-dealers should have to report on segmented orders because execution quality will depend on the qualified auction rather than actions by the originating broker, and suggesting instead a single Rule 605 report that evaluates all qualified auctions).

[195] *See* prior 17 CFR 242.605(a)(1) (requiring ''every'' market center to produce a report). *See also* Rule 605 NMS Plan at n.1 (''An entity that acts as a market maker in different trading venues (*e.g.,* as a specialist on an exchange and as an OTC market maker) would be considered as a separate market center under the Rule for each of these trading venues. Consequently, the entity should arrange for a Designated Participant for each market center/trading venue (*e.g.,* an exchange for its specialist trading and an association for its OTC trading).'') For a description of ''Designated Participant'' as defined in the Rule 605 NMS Plan, *see infra* note 869.

[196] 17 CFR 242.300(k). ''Regulation ATS'' consists of 17 CFR 242.300 through 242.304 (Rules 300 through 304 under the Exchange Act).

[197] *See* Proposing Release, 88 FR 3786 at 3803 (Jan. 20, 2023).

[198] *See id.* To the extent that a reporting firm produces more than one Rule 605 report, the firm could label each report with the type of business reflected on the report.

[199] *See id.*

[200] *See, e.g.,* Healthy Markets Letter at 16 (''[B]rokers that are also market centers (including as OTC market makers) should be required to separately report their market center functions for all covered orders (*e.g.,* ATS or SDP operations).''); Better Markets Letter at 5, n.10 (''[R]equiring SDPs and ATSs to produce Rule 605 reports independently from their broker-dealers operations would increase transparency by allowing market participants to distinguish such activity from more traditional broker-dealer activity.''); Varghese Letter (''Expanding the scope of entities subject to Rule 605 to include . . . single dealer platforms will ensure that a wider range of market participants are held to the same standards of transparency and accountability.'').

the separate reporting requirement for NMS Stock ATSs as proposed.

Two commenters requested clarification and confirmation that order and execution management systems (''OEMSs'') will not need to register as ATSs under the Commission's proposal to amend the definition of ''exchange'' under 17 CFR 240.3b–16 (''Rule 3b–16'') [201] and thus need not comply with Rule 605's separate reporting requirement for NMS Stock ATSs.[202] The Commission is still considering whether to adopt the proposed changes to the definition of ''exchange'' discussed in the 2022 Regulation ATS/Definition of Exchange Proposing Release and 2023 Regulation ATS/Definition of Exchange Reopening Release. Any need to comply with Rule 605's separate reporting requirement under any future rulemaking is outside the scope of this rulemaking.

An industry group and a broker-dealer requested additional clarity around what constitutes an SDP.[203] The broker-dealer suggested that the Commission avoid an over-inclusive definition of SDPs by focusing on the order types used by non-retail investors to interact with SDPs, such as immediate-or-cancel (''IOC'') orders and fill-or-kill orders (''FOKs''), while also capturing substantially similar trading activities to ensure a level playing field.[204] This commenter stated that ''the Commission should consider whether certain Rule 605 metrics may be unduly impacted by differences in SDP business models, rather than execution quality'' (*e.g.,* ''a SDP that sends indications of interest (''IOIs'') to customers may have materially higher fill rates than a SDP that solely receives blind IOCs'').[205] This commenter further suggested that the Commission ''conduct a more holistic review of the Rule 605 reports already produced by ATSs in order to determine whether any additional revisions are warranted in order to accurately report execution quality for non-retail orders'' (*e.g.,* ''the definition of a 'covered order' may need to be amended in order to ensure that the Rule 605 reports are sufficiently comprehensive for non-retail orders'').[206] Another broker-dealer opposed the separate reporting requirement for SDPs, stating that it is ''unnecessary to report these execution quality statistics separately, as users of SDPs are all sophisticated entities capable of carrying out their own execution quality measurements,'' and thus the requirement ''imposes an additional cost on SDPs without any clear benefit.'' [207]

After considering the comments, the Commission is adopting separate reporting for SDPs largely as proposed. The Commission acknowledges that SDPs have different business models and that SDPs that receive blind IOCs throughout the trading day (so-called ''blind pinging'') would likely have execution quality statistics that differ significantly from the statistics of SDPs that send out IOIs. Although a commenter raised concerns about potential differential impacts on Rule 605 metrics for SDPs with different business models,[208] in the Commission's experience SDPs largely receive institutional orders and therefore those market participants that send orders to SDPs generally are or represent sophisticated market participants that would likely be aware of and understand these differences in business models; thus these market participants can contextualize the Rule 605 reports appropriately. To the extent that OTC market makers operating SDPs think that additional context would help market participants understand their Rule 605 reports, these firms generally should consider whether to provide additional explanation on their websites about the nature of their order flow and how it affects the particular SDP's execution quality statistics.

In response to one commenter's statement that imposing a separate reporting requirement on SDPs lacks any clear benefit to justify the additional cost,[209] these order flow differences highlight the transparency benefits that justify the costs of requiring OTC market makers operating SDPs to produce Rule 605 reports separate from their other trading activity.[210] Otherwise, commingling SDP activity with other market center activity in Rule 605 reports may obscure differences in execution quality or distort the general execution quality metrics for the market center. Moreover, Rule 605's description of what constitutes SDP activity for purposes of the separate reporting requirement will help ensure that the SDP-specific Rule 605 reports reflect comparable activity.

In response to one commenter's suggestion that the Commission consider revisions to Rule 605 ''in order to accurately report execution quality for non-retail orders,'' [211] no further changes to Rule 605 are necessary to accommodate reporting by SDPs. Prior to the amendments, market centers included non-retail orders in their Rule 605 reports, to the extent that such orders were held orders, and therefore the reporting requirement for SDPs will not represent the first time that market centers were required to report execution quality for non-retail orders. It is more appropriate in the context of Rule 605 to require the same metrics for all reporting entities. As discussed above, market participants that utilize SDPs generally understand nuances of different market centers. Further, the Commission is adopting a requirement that SDPs prepare Rule 605 reports separate from the Rule 605 reports of their associated broker-dealers so that their customers and market participants will be able to distinguish SDP activity from more traditional dealer activity and separately evaluate reporting firms' execution quality with respect to each type of activity. It is not necessary for the achievement of this goal to make adjustments to the scope of Rule 605 to

[201] Securities Exchange Act Release No. 94062 (Jan. 26, 2022), 87 FR 15496 (Mar. 18, 2022) (''2022 Regulation ATS/Definition of Exchange Proposing Release''). The comment period was reopened on May 9, 2022, and ended on June 13, 2022: Securities Exchange Act Release No. 94868 (May 9, 2022), 87 FR 29059 (May 12, 2022). The Commission reopened the comment period for the 2022 Regulation ATS/Definition of Exchange Proposing Release again in the 2023. *See* Securities Exchange Act Release No. 97309 (Apr. 14, 2023), 88 FR 29448 (May 5, 2023) (''2023 Regulation ATS/Definition of Exchange Reopening Release''). The 2023 Regulation ATS/Definition of Exchange Reopening Release provided supplemental information and economic analysis regarding trading systems that trade crypto asset securities that would be newly included in the definition of ''exchange'' under the proposed rules. *See id.*

[202] *See* letter from Hubert De Jesus, Managing Director, Global Head of Market Structure and Electronic Trading, Samantha DeZur, Managing Director, Global Public Policy Group, BlackRock, Inc. (Mar. 31, 2023) (''BlackRock Letter'') at 4–5 (''Unlike market centers, OEMSs only route orders based on explicit order handling direction provided by a user. . . . OEMSs would not have the necessary data—and are not structured in a manner—that would allow them to file Rule 605 reports.''); Managed Funds Association Letter at 5–6 (''[I]t would be inappropriate for [OEMSs] to fall within the communication protocol systems definition. . . . [OEMSs], which are essentially software systems that help to facilitate and manage trade executions, do not have (and should not be required to develop) the operational capabilities to gather and disseminate information required by Rule 605 reports . . . due to [their] limited role.'').

[203] *See* SIFMA Letter II at 28 (noting that the Commission provides no formal SDP definition); Rule 605 Citadel Letter at 7 (stating its views about the importance of clearly defining what constitutes an SDP).

[204] *See* Rule 605 Citadel Letter at 7 (recommending that the Commission review FINRA Regulatory Notice 18–28, and the comments submitted in response, to define ''SDP'' more precisely).

[205] *Id.* at 7.

[206] *Id.* at 8.

[207] Virtu Letter II at 12–13.

[208] *See* Virtu Letter at 12.

[209] *See supra* note 207 and accompanying text.

[210] *See* section IX.D.2.a)(1) for a discussion of compliance costs related to expanding the scope of Rule 605 reporting entities. *See also* section IX.D.1.a)(2) for a discussion of the benefits of requiring separate Rule 605 reports for SDPs.

[211] *See supra* note 206 and accompanying text.

include more non-retail orders because the amendments to Rule 605 address this separation of SDPs' execution quality statistics.

The Commission also agrees with the two commenters regarding the need for additional clarity around the scope of entities that are SDPs for purposes of Rule 605. After considering commenter suggestions,[212] the Commission is replacing the proposed description of what type of broker-dealer activity constitutes SDP activity for purposes of the separate SDP reporting obligation. In its place, the Commission is adopting a modified description of SDP activity that states: ''Any OTC market maker that provides a trading system for only a single dealer [213] to solely buy and sell securities against all other persons entering orders in that system shall produce a separate report pertaining only to covered orders entered in such trading system.'' [214] Specifically, the Commission's modified SDP description contains two substantive changes to the proposed SDP description. First, the Commission is replacing the term ''market center'' with the term ''OTC market maker'' because the term ''market center'' would have been overbroad. ''Market center'' includes an ATS, national securities exchange, or national securities association, none of which can be a single dealer.[215] Second, the Commission is replacing ''separate routing destination'' with ''trading system'' to focus on the activity that occurs on SDPs and adding ''only'' before ''a single dealer'' to clarify that the trading system offered will not be for multiple dealers and instead will be limited to one dealer.[216]

A broker-dealer recommended that the Commission clarify: (i) the circumstances in which an SDP can be considered to be embedded within an ATS (*e.g.,* by constituting a separate tier within an ATS that can be specifically targeted by IOC or FOK orders), and (ii) whether SDP activity includes orders received from both the client (whether a broker-dealer or not) and from internal smart order routers.[217] First, executions that occur on or through an NMS Stock ATS are attributable to that NMS Stock ATS and covered orders received for execution on or through an ATS must be included in the Rule 605 report pertaining to the ATS rather than on a separate Rule 605 report.[218] Therefore Rule 605 reporting requirements are not dependent on whether ''an SDP [could] be considered to be embedded within an ATS.'' The Commission understands that certain NMS Stock ATSs offer counterparty selection and segmentation procedures that may allow the orders of a particular participant to interact with the orders of only a subset of participants, and in this respect trading activity that occurs on certain NMS Stock ATSs may resemble trading activity that occurs on SDPs.[219] Providing separate Rule 605 reports for SDP-like activity on ATSs would not be practicable given the lack of uniformity among NMS Stock ATSs' operations, particularly their counterparty and segmentation procedures. Another factor that could decrease comparability across reports if they were divided, as suggested by the commenter, is that trading activity on an NMS Stock ATS occurs within the context of regulatory requirements specific to NMS Stock ATSs.[220] In contrast, SDPs (as defined for purposes of Rule 605) operate as broker-dealer trading systems that are not ATSs and thus that are not subject to ATS regulatory requirements. Given the differences in operations and regulatory requirements between the types of trading systems, which affect order interaction and execution, the execution quality statistics for SDP-like trading activity occurring on ATSs could significantly vary in a manner that differs from the variation in execution quality statistics among SDPs, thereby reducing the utility of comparing execution quality statistics for trading activity occurring on SDPs. Second, SDP activity includes orders received from both a client (whether or not a broker-dealer) and internal smart order routers. Orders received from internal smart order routers are included in Rule 605 reports specific to SDPs because the determination that a trading system is an SDP for purposes of Rule 605 reporting requirements depends on the type of trading system that receives the orders and the single dealer counterparty that interacts with the orders that the system receives.[221]

An industry group asked specific questions about how to distinguish between OTC market making and SDP activities in Rule 605 reports.[222] The

[212] In response to the commenter's suggestion that the Commission consider FINRA Regulatory Notice 18–28 to define ''SDP'' more precisely (*see supra* note 204), the Commission observes that FINRA requested comment on a definition of SDP but did not propose or adopt a definition. *See* FINRA Regulatory Notice 18–28.

[213] A dealer is defined in Exchange Act section 3(a)(5), 15 U.S.C. 78c(a)(5).

[214] Final 17 CFR 242.605(a)(1). *Compare* final 17 CFR 242.605(a)(1) *with* proposed Rule 605(a)(1) (''Any market center that provides a separate routing destination that allows persons to enter orders for execution against the bids and offers of a single dealer shall produce a separate report pertaining only to covered orders submitted to such routing destination.''). SDPs are a type of market center as defined in Regulation NMS Rule 600(b)(55) because the description of an SDP in the adopted amendments to Rule 605 includes the term ''OTC market maker'' and the definition of ''market center'' lists OTC market maker as one of the included entities. *See* final 17 CFR 242.600(b)(55). Therefore, as a general matter, SDPs are a type of market center and, as such, are within the scope of Rule 605 reporting entities without reference to the 100,000 customer account threshold.

[215] *See* final 17 CFR 242.600(b)(55) (defining ''market center'' to mean any exchange market maker, OTC market maker, ATS, national securities exchange, or national securities association). *Compare* final 17 CFR 242.600(b)(75) (defining ''OTC market maker'' to mean any dealer that holds itself out as being willing to buy from and sell to its customers, or others, in the United States, an NMS stock for its own account on a regular and continuous basis otherwise than on a national securities exchange in amounts of less than a block size).

[216] Unlike an ATS, on an SDP the broker-dealer operator is the only counterparty to any trade that occurs on the SDP. *See, e.g., Where Do Stocks Trade?, FINRA.org* (Sep. 28, 2023), *available at https://www.finra.org/investors/insights/where-do-stocks-trade#::text=The%20most%20familiar%20type%20of,in%20popularity%20in%20recent%20years.* In contrast, an ATS meets the criteria of 17 CFR 240.3b–16(a) and ''brings together the orders for securities of multiple buyers and sellers.''

[217] *See* Rule 605 Citadel Letter at 7.

[218] *See* final 17 CFR 242.605(a)(1).

[219] NMS Stock ATSs may offer counterparty selection or certain segmentation profiles that allow a single participant to interact with one or certain counterparties. Form ATS–N requires public disclosures about these aspects of an NMS Stock ATS. *See* Form ATS–N, Part III, Items 13 and 14. An NMS Stock ATS that permits a subscriber to use its counterparty selection or segmentation procedures to trade with only one subscriber or a certain subset of subscribers can be required, depending on its operations and arrangement with the subscriber, to disclose additional information in response to other requirements of the Form ATS–N. These disclosures can include, among others, Part II, Item 2 (Affiliates Trading Activities on ATS), Part II, Item 4 (Arrangements with Trading Centers), Part III, Item 7 (Order Types and Attributes), Part III, Item 11 (Trading Services, Facilities, and Rules), and Part III, Item 18 (Fees).

[220] *See, e.g.,* 17 CFR 242.301(b)(3) (containing requirements for ATSs pertaining to order display and execution access); 17 CFR 242.301(b)(5) (containing requirements for ATSs that have a significant percentage of overall trading volume in a security or category of securities during a certain period of time to comply with fair access requirements, which include, among other things, that the ATS establish written standards for granting access to trading on the ATS and not unreasonably prohibit or limit access by applying those access standards in an unfair or discriminatory manner).

[221] *See* final 17 CFR 242.605(a)(1) (defining an SDP as a trading system for only a single dealer to solely buy and sell securities against ''all other persons entering orders in that system'').

[222] *See* SIFMA Letter II at 28 (posing the following interpretive questions to distinguish between OTC market makers and SDPs: (1) ''Is the Commission suggesting that an SDP is a type of OTC market maker and therefore a market center?''; (2) ''Would an SDP be considered an OTC market maker for purposes of any other rule?''; (3) ''Is the Commission assuming that an SDP only accepts IOC orders?''; (4) ''Under what circumstances can an SDP be considered to be embedded within an ATS (such as when an SDP can be specifically targeted within an ATS by IOC or FOK orders)?''; (5) ''Would SDP activity include orders received from both a client (whether or not a broker-dealer) and from internal smart order routers?'').

Commission provides the following responses. First, Rule 605(a), as adopted, defines the separate Rule 605 reporting obligation as applying to any OTC market maker that provides a separate trading system that meets specified criteria; therefore, as it pertains to Rule 605 reporting, any SDP required to prepare Rule 605 reports will be a type of OTC market maker and therefore a market center.[223] Second, the Commission is not changing the definition of ''OTC market maker'' in Rule 600. Thus, any other rule that refers to an ''OTC market maker'' will utilize the same definition in Rule 600. Third, the Commission is not assuming that an SDP accepts only IOC orders. As such, an SDP is not limited to accepting or receiving a particular type of covered order for execution. Fourth, as described above, although a subscriber's activity on an NMS Stock ATS may resemble SDP activity, the trading activity occurs on the ATS and thus is attributable to the ATS for purposes of Rule 605 reporting requirements. Fifth, as described above, SDP activity includes orders received from both a client (whether or not a broker-dealer) and from internal smart order routers.

III. Modifications to Scope of Orders Covered and Required Information

The reports required by Rule 605(a)(1) prior to these amendments grouped orders by both order size and order type and included certain standardized execution quality metrics for all types of orders, as well as additional metrics for market orders and marketable limit orders. For all reporting entities, including larger broker-dealers, the Commission proposed to: (1) modify the order size and order type groupings; and (2) make changes to the required information for all types of orders, market and marketable limit order types, and non-marketable order types. The Commission is adopting the proposed changes to Rule 605 largely as proposed, with certain modifications discussed below. Section III.A. describes the ways in which the Commission is modifying its proposed definition of ''covered order'' in the adopted amendments. Section III.B. describes the modifications that the Commission is making to the information contained in the detailed execution quality reports required by Rule 605(a)(1), including how orders are categorized by size and type, the timestamp conventions, and which execution quality statistics are included.

A. Covered Order

The scope of Rule 605's reporting requirements is limited to covered orders.[224] The Commission proposed expanding the definition of ''covered order'' to include: (1) certain orders received outside of regular trading hours; and (2) orders submitted with stop prices. The Commission also addressed whether non-exempt short sale orders would be covered orders when a price test restriction is in effect for the security.

1. Orders Submitted Pre-Opening/Post-Closing

(a) Proposed Approach

Prior to these amendments, Rule 605 reports were required to include only orders received during regular trading hours[225] at a time when an NBBO is being disseminated. When the Commission adopted Rule 11Ac1–5, the Commission excluded orders submitted during the pre-opening or after the close, among other order types, from the scope of reporting because nearly all of Rule 605's statistical measures required the availability of the NBBO at the time of order receipt as a benchmark.[226] Similarly, orders for which customers requested special handling, including orders to be executed at a market opening price, were excluded from Rule 605 reports because of a concern that their inclusion would skew the general statistics.[227]

In the Proposing Release, the Commission proposed to: (1) expand the scope of Rule 605 reporting to include certain NMLOs submitted outside of regular trading hours if they become executable after the opening or reopening of trading during regular trading hours; [228] (2) amend the definition of ''marketable limit order'' to specify that the marketability of an order received when the NBBO is not being disseminated would be determined using the NBBO that is first disseminated after the time of order receipt; [229] and (3) exclude from Rule 605 reports market or limit orders received during regular trading hours at a time when an NBBO is being disseminated but prior to the dissemination of the primary listing market's first firm, uncrossed quotations for a trading day (''Opening Exemption''),[230] thereby incorporating previously granted exemptive relief into the proposed definition of ''covered order.'' [231] The Commission's proposed definition of ''covered order'' would have excluded market orders and marketable limit orders submitted prior to open or during a trading halt; therefore, any limit order received outside of regular trading hours or during a trading halt that is marketable based on the first disseminated NBBO during regular trading hours after the time of order receipt would not have been a covered order for purposes of Rule 605.[232] Additionally, the Commission proposed amending Rule 605(a)(1) to require a market center, broker, or dealer to include in its monthly report, in addition to the covered orders in NMS stocks that it received for execution from any person, those covered orders in NMS stocks that it received for execution in a prior calendar month but which remained open.[233]

[223] *See supra* note 214.

[224] *See* prior 17 CFR 242.605(a)(1); final 17 CFR 242.605(a)(1). *See supra* note 4.

[225] ''Regular trading hours'' is defined as the time between 9:30 a.m. and 4 p.m. Eastern Time, or such other time as is set forth in the procedures established pursuant to 17 CFR 242.605(a)(3). *See* final 17 CFR 242.600(b)(88).

[226] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75421 (Dec. 1, 2000).

[227] *See id.*

[228] *See* Proposing Release, 88 FR 3786 at 3804 (Jan. 20, 2023). The Commission proposed to revise the definition of ''categorized by order type'' to include executable NMLOs and executable orders submitted with stop prices. *See id.* at 3804, n. 227; proposed Rule 600(b)(20). The Commission also proposed to expand the definition of ''covered order'' to cover NMLOs received by a market center or broker-dealer outside of regular trading hours or when an NBBO is not being disseminated and, if executed, executed during regular trading hours. *See* Proposing Release, 88 FR 3786 at 3804 (Jan. 20, 2023); proposed Rule 600(b)(30).

[229] *See* Proposing Release, 88 FR 3786 at 3804 (Jan. 20, 2023). Specifically, the Commission proposed that an order received at a time when a national best bid and national best offer is not being disseminated would be a marketable limit order if it is a buy order with a limit price equal to or greater than the national best offer at the time that the national best offer is first disseminated during regular trading hours after the time of order receipt, or if it is a sell order with a limit price equal to or less than the national best bid time at the time that the national best bid is first disseminated during regular trading hours after the time of order receipt. *See id.*; proposed Rule 600(b)(57).

[230] *See* Proposing Release, 88 FR 3786 at 3804–05 (Jan. 20, 2023); proposed Rule 600(b)(30). The Commission stated that, pursuant to the proposed amendments to Rule 605, NMLOs (including orders submitted with stop prices) received outside of regular trading hours or at a time when an NBBO is not being disseminated would have been considered covered orders, provided the NMLOs were not executed outside of regular trading hours. *See* Proposing Release, 88 FR 3786 at 3805 (Jan. 20, 2023).

[231] *See* letter from Annette L. Nazareth, Director, Division of Market Regulation to Theodore Karn, President, Market Systems, Inc., dated June 22, 2001 (''Market Systems Exemptive Letter'') at 2. The Commission proposed to rescind the Opening Exemption. *See* Proposing Release, 88 FR 3786 at 3805 (Jan. 20, 2023).

[232] *See* Proposing Release, 88 FR 3786 at 3804 (Jan. 20, 2023).

[233] *See id.* at 3805.

(b) Final Rule and Discussion

The Commission is adopting as proposed an expansion to the scope of Rule 605 reporting to include NMLOs submitted outside of regular trading hours that become executable after the opening or reopening of trading during regular trading hours.[234] The Commission is adopting the definition of ''covered order'' as it relates to orders submitted outside of regular trading hours largely as proposed, but with a modification to accept a commenter's recommendation as discussed below. The Commission is similarly modifying the proposed definitions of ''executable,'' ''marketable limit order,'' and ''beyond-the-midpoint limit order'' [235] to accommodate this modification. Further, the Commission is adopting as proposed the requirement for a market center, broker, or dealer to include in its monthly report those covered orders in NMS stocks that it received for execution in a prior calendar month but which remained open.[236]

Generally, individual investors supported including certain orders submitted outside of regular trading hours within the scope of covered orders.[237] One individual investor who supported the proposed change stated that after-market and pre-market trades play a greater role today than ever before, with many of the price changes occurring during these times rather than during market hours.[238]

A broker-dealer supported the inclusion of pre-market orders in Rule 605 reports, stating these orders (along with other included order types) would provide investors with a more complete picture of order execution quality across the marketplace.[239] Another commenter stated that NMLOs entered outside of ''normal hours'' should not be included because ''these will likely skew the statistics.'' [240] Specifically, this commenter stated that frequently the first quote after opening is wide and not representative of the quote when the primary exchange opens, and many orders deemed NMLOs by this benchmark would likely fill as soon as the primary exchange opens. Therefore, according to this commenter, ''including these orders will skew the NMLO stats and lead to difficult comparisons between brokers.'' [241]

A national securities exchange supported inclusion of certain orders submitted outside of regular trading hours within the definition of ''covered order.'' [242] An investor advocacy group recommended that Rule 605 run from primary market open to primary market close (*e.g.,* 9:30 a.m. to 4 p.m. eastern standard time).[243]

An industry group stated that the proposed definition of ''covered order,'' in the context of NMLOs, does not address orders received during regular trading hours but prior to the primary listing market disseminating its first firm, uncrossed quotations in a security (referred to herein as the ''interim opening period'').[244] This commenter recommended that the demarcation point for whether an order should be treated as a pre-open (or post-close) order or an order received during regular trading hours should be the point at which the primary listing market disseminates its first firm, uncrossed quotations for the applicable security.[245] To address orders received during the interim opening period, this commenter recommended that the Commission change each of the references to the ''time when a national best bid and national best offer is being disseminated'' in the proposed definitions of ''marketable limit order'' and ''beyond-the-midpoint limit order'' to reflect not only that a national best bid and national best offer has been disseminated but also that the primary market has disseminated its first firm, uncrossed quotations for the security.[246]

After a review of the comments, for the reasons discussed in the Proposing Release and discussed below, the Commission is adopting the definition of ''covered order,'' along with other changes addressing the expansion of the scope of Rule 605 to include certain orders received outside of regular trading hours, largely as proposed.[247] However, in response to comments, the Commission is making several modifications that address the treatment of orders received during the interim opening period. As discussed below, these changes help address the concerns of one of the commenters that the inclusion of NMLOs entered outside of normal hours in Rule 605 reports would skew the reported execution quality statistics.[248]

When proposing to incorporate the exemptive relief contained in the Opening Exemption [249] into the definition of ''covered order'' with respect to market or limit orders received during regular trading hours at a time when an NBBO is being disseminated, the Commission recognized that quotations disseminated prior to a primary listing market disseminating its first quotations in a security often reflect spreads that vary significantly from the norm and intended that the proposed changes to the definition would prevent such quotations from skewing execution quality statistics.[250] In proposing to expand the scope of Rule 605 reporting requirements to include certain NMLOs submitted outside of regular trading hours if they become executable during the opening or reopening of trading during regular trading hours, the Commission intended to provide increased visibility into the execution quality for individual investor orders.[251] The Commission agrees with the commenter who recommended additional changes to the definition of ''covered order'' (along with related changes to the definitions of ''marketable limit order'' and ''beyond-the-midpoint limit order'') and stated that treating orders received during the interim opening period in the same manner as orders received outside of

[234] *See* final 17 CFR 242.600(b)(19) (defining ''categorized by order type'').

[235] As discussed further below, the Commission is making additional modifications to this order type category and renaming the associated definition as ''midpoint-or-better limit order.'' *See infra* section III.B.2.b).

[236] *See* final 17 CFR 242.605(a)(1).

[237] *See, e.g.,* Pritchard Letter; letter from Dan Liefwalker (Mar. 7, 2023); Macarthur Letter; Genco Letter; Varghese Letter; letter from Jeremy B. Beddo (Mar. 30, 2023) (''Beddo Letter'').

[238] *See* Joy Letter. However, an individual investor who opposed the proposal stated that including as covered orders certain orders submitted outside of regular trading hours (as well as certain orders submitted with stop prices) ''could make it difficult for retail investors to place orders at the best possible price'' and ''[t]his could lead to retail investors being left with less favorable prices and missing out on potential gains in the dark markets.'' Letter from Jacob Gillmore (Feb. 24, 2023) (''Gillmore Letter''). It is not clear—and the commenter does not explain—how including orders submitted outside of regular trading hours in Rule 605 reports could make it difficult for retail investors to place orders at the best possible price.

[239] *See* Virtu Letter II at 3.

[240] Schwab Letter II at 32.

[241] *Id.*

[242] *See* Nasdaq Letter at 43, text accompanying n.121.

[243] *See* Healthy Markets Letter at 17. This commenter's suggestion of when Rule 605 should be in effect is consistent with the definition of ''regular trading hours.'' *See* final 17 CFR 242.600(b)(88) (''Regular trading hours means the time between 9:30 a.m. and 4 p.m. Eastern Time, or such other time as is set forth in the procedures established pursuant to § 242.605(a)(3).'') This commenter did not address whether to include certain orders submitted outside of regular trading hours but executed during regular trading hours within the scope of Rule 605's reporting requirements as proposed.

[244] *See* FIF Letter at 8.

[245] *See id.* at 7.

[246] *See id.* at 8.

[247] As discussed below, the Commission also is rescinding a portion of the Market Systems Exemptive Letter and updating a related staff FAQ. *See infra* section VI.

[248] *See supra* note 240 and accompanying text.

[249] *See supra* note 230 and accompanying text.

[250] *See* Proposing Release, 88 FR 3786 at 3804–05 (Jan. 20, 2023).

[251] *See id.* at 3804.

regular trading hours will be consistent with the Commission's stated objectives.[252]

Accordingly, the Commission is adopting a definition of ''covered order'' that scopes in any NMLO (including an order submitted with a stop price) that is received by a market center, broker, or dealer at a time before the primary listing market has disseminated its first firm, uncrossed quotations in the security and that, if executed, is executed during regular trading hours.[253] The ''covered order'' definition, as proposed and as the Commission is adopting, does not include within its scope those market orders and marketable order types received outside of regular trading hours. Keeping market and marketable limit orders received during the interim opening period outside the scope of covered orders is consistent with how these orders are treated when received outside of regular trading hours. The changes to the definition of ''covered order,'' together with the modifications to the definition of ''executable'' and ''marketable limit order'' discussed below, will help ensure that an order received or executed during the interim opening period will be treated in the same manner as any other order received or executed pre-open or post-close.

The Commission is also adopting a modified version of the proposed definition of ''executable'' that specifies that whether an NMLO is executable will be determined based on the order's limit price during regular trading hours and after the primary listing market has disseminated its first firm, uncrossed quotations in the security.[254] Under the definition of ''executable'' as proposed, an NMLO (including an order submitted with a stop price) received during the interim opening period would have had the possibility of becoming executable before the primary listing market has disseminated its first firm uncrossed quotations in the security. During this interim opening period, quotations and execution prices may be less representative of the value of the security than during the rest of regular trading hours because, as stated above, quotations disseminated prior to a primary listing market disseminating its first quotations in a security often reflect spreads that vary significantly from the norm during regular trading hours. Therefore, a scenario in which an NMLO becomes executable (as defined in the proposal) during the interim opening period led to two potential ways in which including these orders could skew execution quality statistics. First, if the NMLO executed during the interim period (including at the opening of the primary listing market), that order would have been included in reports required pursuant to proposed Rule 605(a)(1) as an NMLO that became executable and executed during regular trading hours. Second, the benchmark that would have been used for those statistics to measure from the time that an order becomes executable[255] would have been a quotation price from the interim opening period. The modification to the proposed definition of ''executable'' that the Commission is adopting addresses both concerns. Pursuant to the adopted rule, an NMLO (including an order submitted with a stop price) received during regular trading hours will not have the possibility of being considered executable until after the primary listing market has disseminated its first firm, uncrossed quotations in the security.[256] Further, the benchmark used for those statistics that are measured from the time that an order becomes executable will be measured from a point in time that is after the primary listing market has disseminated its first firm, uncrossed quotations in the security. These changes to the final rule will help to prevent the potential skewing of execution quality statistics caused by reliance on quotations from the interim opening period, and thereby increase the comparability of Rule 605 reports.

In addition, the Commission is revising the proposed definition of ''marketable limit order'' so that, with respect to an order received at a time when the NBBO is being disseminated but before the primary listing market has disseminated its first firm, uncrossed quotations in the security (*i.e.,* during the interim opening period), whether the order is a marketable limit order will be determined from the time that the primary listing market disseminates its first firm, uncrossed quotations in the security.[257] This change will move the determination of whether an order is a marketable limit order or a NMLO to a time when the NBBO is more representative of the security's price than may be the case during the interim opening period. The Commission is also modifying the definition of ''midpoint-or-better limit order'' from the proposed definition[258] in a similar manner so that the price used to determine whether an order is a midpoint-or-better limit order will be more representative of the security's price. The definition that the Commission is adopting specifies that, for orders received when an NBBO is being disseminated and the primary listing market has disseminated its first firm, uncrossed quotations in the security (*i.e.,* after the interim opening period), whether the order is a midpoint or better limit order will be determined based on the time of order receipt.[259] The adopted definition also specifies that, for orders received at a time when the NBBO is being disseminated but before the primary listing market has disseminated its first firm, uncrossed quotations in the security (*i.e.,* during the interim opening period), whether the order is a midpoint-or-better limit order will be determined from the time that the primary listing market disseminates its first firm, uncrossed quotations in the security.[260] These changes also will help to prevent skewing of execution quality statistics and thereby increase the comparability of Rule 605 reports.

2. Stop Orders

(a) Proposed Approach

Orders submitted with stop prices were not included in Rule 605 reports prior to these amendments because the definition of ''covered order'' excluded orders with special handling instructions, including orders submitted with stop prices.[261] The Commission

[252] *See* FIF Letter at 7–8.

[253] *See* final 17 CFR 242.600(b)(27).

[254] *See* final 17 CFR 242.600(b)(39).

[255] The Commission proposed to measure the time to execution for non-marketable orders from the time such orders become executable. *See infra* section III.B.3.

[256] An NMLO (including orders submitted with stop prices) that executes during the interim opening period (including an NMLO that executes at the opening of the primary listing market) will not have the opportunity to meet the definition of executable; therefore, such an order will not be included in a Rule 605 report because the reports required by Rule 605(a)(1) include only NMLOs that are executable. *See* final 17 CFR 242.600(b)(39). This treatment of an NMLO that executes during the interim opening period will be similar to the treatment of an NMLO that executes outside of regular trading hours and will similarly prevent order executions where quotations may vary significantly from the norm from skewing execution quality statistics. *See* section III.A.2.b) *infra* for additional discussion of orders submitted with stop prices and section III.B.2.a)(2) *infra* for additional discussion of the defined term ''executable.''

[257] *See* final 17 CFR 242.600(b)(56).

[258] As discussed further below, the Commission is making additional modifications to this order type category and renaming the proposed term ''beyond-the-midpoint limit order'' to be ''midpoint-or-better limit order.'' See infra section III.B.2.b).

[259] *See* final 17 CFR 242.600(b)(57).

[260] *See id.*

[261] *See* prior 17 CFR 242.600(b)(22). Generally, an order submitted with a stop price may become either a market order or a limit order when the offer (bid) reaches the stop price for a buy (or sell) order or the security trades at or above (or below) the stop price for a buy (or sell) order.

proposed to remove this exclusion and measure the execution quality of orders submitted with stop prices from the time such orders become executable.[262] As part of the proposed definition of ''executable,'' the Commission specified that executable means, for any buy order submitted with a stop price, that the stop price is equal to or greater than the national best bid during regular trading hours, and, for any sell order submitted with a stop price, that the stop price is equal to or less than the national best offer during regular trading hours.[263] In addition, the Commission proposed to modify the definition of ''categorized by order type'' to add executable orders submitted with stop prices as a separate order type category.[264]

(b) Final Rule and Discussion

The Commission is adopting the definition of ''covered order'' as proposed to include orders submitted with stop prices within the scope of Rule 605. However, the Commission is modifying the proposed definition of ''executable'' as it pertains to orders submitted with stop prices in response to recommendations from commenters. Additionally, the Commission is modifying the proposed definition of ''categorized by order type'' to include separate categories for executable market orders submitted with stop prices, executable marketable limit orders submitted with stop prices (''executable stop marketable limit orders''), and executable non-marketable limit orders submitted with stop prices (''executable stop non-marketable limit orders'' or ''executable stop NMLOs''), in response to comments. As part of adding these separate stop order categories, the Commission is also adding new definitions of ''executable stop marketable limit order'' and ''executable stop non-marketable limit order.''

Individual investors generally supported including certain orders submitted with stop prices within the definition of ''covered order.'' [265] A national securities exchange supported inclusion of orders submitted with stop prices within the definition of ''covered order.'' [266] One broker-dealer supported the inclusion of executable stop orders as an order type.[267]

Another broker-dealer supported including stop orders, but stated that there are many different types of stop orders. This commenter stated that, ''rather than attempting to define what constitutes a trigger and its corresponding reference market for purposes of determining whether and how a stop order is included within Rule 605, it would be preferable to simply require that all stop orders that are triggered be included in Rule 605 reports to the extent that the resulting market or limit order is a covered order.'' [268] Another commenter stated that the definition of executable stop order ''runs counter to how stop orders actually become executable.'' [269] According to this commenter, while FINRA Rule 5350 defines a stop order as ''an order to buy (or sell) that becomes a market order to buy (or sell) when a transaction occurs at or above (below) the stop price,'' broker-dealers may elect to trigger a stop order in a different fashion but are prevented from calling it a ''stop order.'' [270]

An industry group suggested that the Commission and FINRA adopt consistent usage of the term ''stop order'' and other relevant terms because the proposed definition is inconsistent with the terminology in FINRA Rule 5350 in a number of respects.[271] The commenter stated that stop orders should be reported separately from other types of orders, but suggested that the Commission modify the criteria for when to include stop orders in Rule 605(a)(1) reports and expand the order type categories related to stop orders.[272] This commenter recommended that stop orders become reportable if the order is ''triggered'' or ''activated'' and that an alternate term along these lines be used instead of ''executable.'' [273] According to this commenter, requiring reporting pursuant to Rule 605 ''with respect to any time period prior to the triggering of a stop order would provide no value to market participants and would provide misleading information to the market'' because there is no action that a firm can take to execute a stop order prior to the point when the order is triggered.[274]

After review of the comments, the Commission is adopting a modified definition of ''executable'' as it pertains to orders submitted with stop prices. As adopted, ''executable,'' with respect to orders submitted with stop prices, means that the stop price has been triggered during regular trading hours and after the primary listing market has disseminated its first firm, uncrossed quotations in the security.[275] As stated by commenters, orders may be submitted with stop prices that trigger or activate based on different conditions, such as a last sale price or a change in the NBBO.[276] The definition of ''executable'' that the Commission is adopting will more broadly encompass the different conditions that may convert an order with a stop price into an order that may execute.[277] Additionally, this change addresses a commenter's suggestion by preventing stop orders from being executable before they have been triggered.[278]

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[262] *See* Proposing Release, 88 FR 3786 at 3805 (Jan. 20, 2023); proposed Rule 600(b)(30).

[263] *See* Proposing Release, 88 FR 3786 at 3805, 3810, n.302 (Jan. 20, 2023); proposed Rule 600(b)(42).

[264] *See* Proposing Release, 88 FR 3786 at 3805, n.241 (Jan. 20, 2023); proposed Rule 600(b)(20).

[265] *See* Macarthur Letter; Cesar Letter; Genco Letter; Varghese Letter. *See also supra* note 238 (discussing Gillmore Letter, which relates to whether to include as covered orders certain orders submitted outside of regular trading hours and orders submitted with stop prices).

[266] *See* Nasdaq Letter at 44.

[267] *See* Virtu Letter II at 3.

[268] Rule 605 Citadel Letter at 12.

[269] Schwab Letter III at 5–6.

[270] *Id.* at 6. According to this commenter, the most common other trigger condition on a sell stop is the bid, but very rarely do equity sell stop orders trigger off the ask. *See id.*

[271] *See* FIF Letter at 9, 12. This commenter stated that it was using the term ''stop order'' in a manner consistent with the Commission's usage of the term in the Proposing Release. *See id.* at 9. This commenter stated that it used ''stop order'' to include stop orders and stop limit orders, as those terms are defined in FINRA Rule 5350, but also included orders that are triggered upon the stop price matching (or passing) a quoted price, in addition to those orders triggered upon the stop price matching (or passing) a trade price, and trailing stop orders. *See id.*

[272] *See id.* at 9–11.

[273] *See id.* at 10, 11–12. This commenter stated that the terms ''triggered'' and ''activated'' are used interchangeably in FINRA Rule 5350, Supplementary Material .01 and .02 and that the commenter considers these terms to have the same meaning as applied to stop orders. *See id.* at 10 & n.25. This commenter also stated that its members do not believe that it would be necessary for the Commission to define ''triggering'' or ''activation'' because this concept for a stop order is well-understood by industry members and regulators. *See id.* at 11. *See also* FIF Letter II at 2. Further, this commenter stated that a material percentage of stop orders are triggered based on a change in the NBBO (in most cases, but not always, the opposite-side quote) and a material percentage of stop orders are triggered based on a change in the last sale price. *See id.*

[274] *See* FIF Letter at 10.

[275] *See* final 17 CFR 242.600(b)(39). The addition of the reference to the interim opening period is discussed in section III.A.1.b) *supra.*

[276] The Commission's analysis of stop order volume demonstrates that most stop orders are triggered by the last sale price, but there is also nontrivial order flow associated with other trigger events, including changes to the quotation. *See infra* text accompanying note 1167; Table 3.

[277] Although the Commission is not adopting a commenter's suggestion to use the term ''triggered'' or ''activated'' instead of ''executable'' when used in connection with stop orders (*see supra* note 273 and accompanying text), redefining ''executable'' to mean that an order's stop price has been triggered during regular trading hours will have the same substantive effect.

[278] *See supra* note 274 and accompanying text. In addition, revising the definition of ''executable'' to focus on when a stop order has been triggered is consistent with the Commission's goal of helping investors compare the performance of market centers and broker-dealers from a point in time

A commenter suggested that Rule 605 reports should exclude stop orders to ''avoid confusion'' and allow firms to disclose the relevant details to their clients in a manner consistent with the clients' trading experience.[279] However, such disclosures would not be an adequate substitute because they would not be required, might not be provided in a uniform format, and might not be available to market participants that are not clients of a particular firm, all of which would impede market participants' ability to compare statistics across firms.

An industry group recommended that: (1) once a stop order without a limit price has been triggered, the order should be reported as a stop market order; and (2) once a stop limit order has been triggered, the order should be reported in one of several new order type categories based on the status of the order at the time the order is triggered.[280] This commenter further suggested that, for purposes of representing all of these order type categories, the Commission should add a column to Rule 605(a)(1) reports to indicate whether the applicable row pertains to stop orders.[281] A commenter that recommended excluding stop orders from Rule 605 reports stated that ''stop orders can have at least three distinct behaviors after they are triggered—market order, marketable limit order, and nonmarketable limit order'' and suggested that a ''more transparent way to include these orders would be to create three separate categories of stop orders reflecting these triggers.'' [282]

In consideration of these comments, the Commission is modifying Rule 605's treatment of stop orders from the proposal to split executable stop orders into three categories—executable market orders submitted with stop prices, executable stop marketable limit orders, and executable stop NMLOs—based on the stop orders' status at the time that they are triggered. Separating executable stop orders into these three categories will group orders with similar execution profiles.[283] To implement these changes to the treatment of stop orders, the Commission is: (1) modifying the proposed definition of ''categorized by order type'' to replace the category for executable orders submitted with stop prices with categories for executable market orders submitted with stop prices, executable stop marketable limit orders, and executable stop non-marketable limit orders; [284] (2) adding new defined terms of ''executable stop marketable limit order'' and ''executable stop non-marketable limit order;'' [285] and (3) modifying the execution quality statistics required for stop orders to align the three categories of stop orders with the type of order they most resemble once triggered.[286]

In response to comments received, the Commission conducted a supplemental analysis of the distribution of stop orders that fell into six existing order type categories once triggered using a sample of CAT data for 400 stocks for March 2023. The results are presented in Table 1 and show that the majority of orders submitted with a stop price that trigger are market orders when triggered (almost 86%). However, a significant percentage of orders submitted with a stop price that trigger are limit orders.[287]

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when such orders could reasonably be expected to execute. *See* Proposing Release, 88 FR 3786 at 3805 (Jan. 20, 2023).

[279] *See* Schwab Letter III at 5–6. This commenter raised, but did not recommend, an alternative approach. *See infra* note 282 and accompanying text.

[280] *See* FIF Letter at 10–11. Specifically, this commenter suggested the following new order type categories for limit orders with a stop price: (a) stop marketable limit order for an order that is a marketable limit order at the trigger time; (b) stop beyond-the-midpoint limit order for an order that is a beyond-the-midpoint limit order at the trigger time; and (c) stop executable NMLO for an order that is an NMLO at the trigger time. *See id.* This commenter also stated that a material percentage of stop orders have a limit price and a material percentage of stop orders do not have a limit price. *See* FIF Letter II at 2.

[281] *See* FIF Letter at 9; FIF Letter III at 4.

[282] Schwab Letter III at 6. This commenter did not recommend this approach because, according to the commenter, it would ''create increased complexity with little benefit for the individual investor.'' Id. The Commission disagrees. The Commission continues to believe that including stop orders within the scope of the Rule will benefit market participants by allowing them to analyze variations in execution quality. *See* Proposing Release, 88 FR 3786 at 3805 (Jan. 20, 2023). Moreover, stop orders make up a nontrivial percentage of orders from individual investors. *See infra* Table 3.

[283] *See infra* note 1387 and accompanying text.

[284] *See* final 17 CFR 242.600(b)(19).

[285] *See* final 17 CFR 242.600(b)(40) and (41).

[286] *See* final 17 CFR 242.605(a)(1)(i), (ii), and (iii).

[287] In addition, the Commission's analysis of stop order volume shows that there is a significant volume of stop orders with and without limit prices. *See infra* Table 3 (showing that stop orders placed by institutional investors are 36.1% market orders and 63.9% limit orders, and stop orders placed by individual investors are 89.0% market orders and 11.0% limit orders). These results are consistent with the commenter who stated that a material percentage of stop orders have a limit price and a material percentage of stop orders do not have a limit price. *See* FIF Letter II at 2.

Table 1: Number of Triggered Stop Orders (Mar. 2023)

Order Type	Number of Stop Orders	Percentage of Stop Orders
Market	190,027	85.99%
Marketable Limit	26,097	11.81%
Beyond-the-Midpoint	1,770	0.80%
At-the-Midpoint	686	0.31%
Below-the-Midpoint	1,118	0.51%
At-the-Quote	1,282	0.58%

This table presents the distribution of stop orders across different order types (market, marketable limit, beyond-the-midpoint, at-the-midpoint, below-the-midpoint, and at-the-quote), using a sample of CAT data for 400 stocks for Mar. 2023. See infra note 1261 for a description of this dataset. The data includes all stop orders that were triggered during Mar. 2023 from orders that originated during Mar. 2023. Stop limit orders are identified as marketable, beyond-the-midpoint, at-the-midpoint, below-the-midpoint, or at-the-quote based on the NBBO at the time the stop order triggered. NMLOs categories are defined as follows. "Beyond-the-midpoint" NMLOs consist of, for sell orders, NMLOs with limit prices lower than the midpoint but higher than the national best bid ("NBB"), and, for buy orders, NMLOs with limit prices higher than the midpoint but lower than the national best offer ("NBO"). "At-the-midpoint" NMLOs consist of NMLOs with limit prices equal to the NBBO midpoint. "Below-the-midpoint" NMLOs consist of, for sell orders, NMLOs with limit prices higher than the midpoint but less than the NBO and, for buy orders, NMLOs with limit prices lower than the midpoint but higher than the NBB. "At-the-quote" NMLOs consist of, for sell orders, NMLOs with limit prices equal to the NBO and, for buy orders, NMLOs with limit prices equal to the NBB. "Near-the-quote" NMLOs consist of, for sell orders, NMLOs with limit prices worse (i.e., higher) than the NBO by no more than $0.10 and, for buy orders, NMLOs with limit prices worse (i.e., lower) than the NBB by no more than $0.10. "Away-from-the-quote" NMLOs consist of, for sell orders, NMLOs with limit prices worse (i.e., higher) than the NBO by more than $0.10 and, for buy orders, NMLOs with limit prices worse (i.e., lower) than the NBB by more than $0.10.

The Commission is adopting definitions for ''executable stop marketable limit order'' and ''executable stop non-marketable limit order'' to provide that the determination of which of these two categories a limit order submitted with a stop price falls into is made using the point in time that the order submitted with a stop price is triggered.[288] Utilizing this determination point in time will help align the sub-grouping of limit orders submitted with stop prices with the characteristics of these orders once the stop price is triggered. Under the adopted definitions, an ''executable stop marketable limit order'' will be an order whose limit price is equal to or greater than the best offer (for a buy order) or equal to or less than the national best bid (for a sell order) at the time the stop price is triggered, *i.e.,* when the limit order submitted with a stop price becomes executable.[289] Similarly, an ''executable stop non-marketable limit order'' will be an order whose limit price is less than the best offer (for a buy order) or greater than the national best bid (for a sell order) at the time the order becomes executable.[290]

As proposed, Rule 605 would have required that the execution quality statistics provided for executable orders submitted with stop prices include those execution quality statistics required for non-marketable order types.[291] However, executable market orders submitted with stop prices and executable stop marketable limit orders (together, ''marketable stop order types'') will behave like market and marketable limit orders once triggered rather than NMLOs. Therefore, the Commission is modifying the proposed execution quality statistics for marketable stop order types to provide that the same statistics required of other marketable order types (*e.g.,* price improvement statistics) be calculated for these types of stop orders.[292] However, because executable stop NMLO orders will behave like other NMLOs once triggered, the Commission is requiring that the same statistics required of other non-marketable order types (*e.g.,* relative fill rate) be calculated for these stop orders.[293]

[288] *See* final 17 CFR 242.600(b)(40) and (41). Measurement of the execution quality of an executable stop marketable limit order and an executable stop non-marketable limit order begins when the stop price is triggered because that is the point in time at which customers generally expect such orders to be eligible to execute. While the determination of whether a limit order is a marketable limit order is calculated differently, *i.e.,* based on the time of order receipt, *see* final 17 CFR 242.600(b)(56), the time of order receipt will similarly allow customers to compare execution quality from a point in time when such orders could reasonably be expected to execute.

[289] *See* final 17 CFR 242.600(b)(40).

[290] *See* final 17 CFR 242.600(b)(41).

[291] *See* Proposing Release, 88 FR 3786 at 3805, 3821 (Jan. 20, 2023); proposed Rule 605(a)(1)(i) and (iii).

[292] *See* final 17 CFR 242.605(a)(1)(ii).

[293] *See* final 17 CFR 242.605(a)(1)(iii).

The Commission is not adopting the commenter's recommendation to add an additional column to the Rule 605(a)(1) detailed report to denote whether a particular row pertains to stop orders.[294] The additional order type categories in amended Rule 605 for executable market orders submitted with a stop price, executable stop marketable limit orders, and executable stop NMLOs partially align Rule 605 with this recommendation substantively because they will require firms to provide execution quality statistics for these types of stop orders that are grouped according to the characteristics of the orders once triggered. However, the commenter's recommendation would in effect have created a separate order type category for stop orders with characteristics of each of the other order types (*e.g.,* executable midpoint-or-better limit order with a stop condition, executable marketable IOC with a stop condition). The Commission does not believe the execution profiles for an order type category or categories for executable midpoint-or-better order types with a stop condition would vary significantly enough from other executable stop NMLOs to warrant additional order type categories. A significant portion of midpoint-or-better limit orders may have the expectation of executing immediately, for example, against hidden or odd-lot liquidity inside of the spread.[295] Because these orders are likely to have different execution profiles than other types of NMLOs,[296] the Commission is requiring separate order type categories for midpoint-or-better limit orders.[297] In contrast, an order submitter placing a stop limit order likely does not have an expectation of executing immediately and does not know ex ante what the market conditions will be when the stop price is triggered, *i.e.,* how aggressive the limit price will be when the order is converted into a limit order. Therefore, because executable midpoint-or-better order types with a stop condition are not likely to have significantly different execution profiles than other executable stop NMLOs, the Commission is not requiring the use of order type categories that would further sub-divide executable stop NMLOs. In addition, it is not likely that orders will have both an IOC instruction (which indicates an expectation of immediacy) and a stop condition (which indicates an intention to wait until market conditions change and trigger the stop condition). Even if such orders are utilized, they are not likely to have significantly different execution profiles than other stop orders that fall within the same order type categories. Thus, the Commission is not requiring the use of order type categories that would further sub-divide the categories for orders submitted with stop prices.

3. Non-Exempt Short Sale Orders

(a) Proposed Approach

Commission staff has taken the position that staff would view all short sale orders that are not marked ''short exempt'' (''non-exempt short sale orders'') as special handling orders and, in the staff's view, these orders may be excluded from the definition of ''covered order.'' [298] Non-exempt short sale orders are subject to a price test under 17 CFR 242.201 (''Rule 201'' of Regulation SHO (17 CFR 242.200 through 242.204)) that sets forth a short sale circuit breaker that is triggered in certain circumstances, after which time a price restriction will apply to short sale orders in that security for that day and the following day.[299] The Commission proposed that non-exempt short sale orders would not be considered special handling orders unless a price test restriction is in effect for the security. As proposed, non-exempt short sale orders would fall within the definition of ''covered order'' and thus be subject to Rule 605 reporting, unless another exclusion applies. Conversely, during a short sale price test, a short sale order not marked ''exempt'' would continue to be subject to special handling and would be excluded from the definition of ''covered order'' and thus from Rule 605 reporting.[300]

(b) Final Rule and Discussion

The Commission is adopting as proposed its position that non-exempt short sales orders will not be considered special handling orders unless a price test restriction is in effect for the security. The Commission received several comments on this aspect of the proposal. One national securities exchange supported the proposed treatment of non-exempt short sale orders.[301] Another national securities exchange suggested that the Commission provide more detailed instructions relating to any order types that would be excluded from the definition of ''covered order,'' *e.g.,* order types that are considered ''special handling,'' ''to ensure that such orders are treated uniformly by respondents in their data disclosures.'' [302] Two broker-dealers supported the proposal,[303] as did an individual investor who stated that non-exempt short sale orders are ''a core component of the current market.'' [304] An industry association also supported this aspect of the proposal, but asked how the Commission intends to document the change, which is not reflected in any change to the definition of ''covered order.'' [305]

After consideration of the comments, the Commission is adopting the position that non-exempt short sale orders will not be considered special handling orders unless a price test restriction is in effect for the security, as proposed. As discussed in the Proposing Release, when a non-exempt short sale order is subject to a price test restriction under Rule 201 of Regulation SHO, a trade may only take place at least one tick above the national bid or offer; however, non-exempt securities are infrequently subject to such a price test restriction.[306] The inclusion of non-exempt short sale orders within the scope of Rule 605 when a short sale price test is not in effect will not skew execution quality statistics because non-exempt short sale orders are not tick-sensitive during this period. However, when a price test restriction under Rule 201 of Regulation SHO is in effect, any non-exempt short sale order (*i.e.,* an order that is tick-sensitive) will be an ''order to be executed only on a particular type of tick or bid'' which is one of the types of special handling orders specified as being excluded from the definition of ''covered order.'' [307] Such orders will

[294] *See supra* note 281 and accompanying text.

[295] *See infra* section IX.D.1.b)(2)(a)(ii).

[296] *See infra* section IX.C.3.c)(3).

[297] *See infra* section III.B.2.b)(2).

[298] *See* prior 17 CFR 242.600(b)(22); ''Responses to Frequently Asked Questions Concerning Rule 605 of Regulation NMS'' (Feb. 22, 2013) (''2013 FAQs'').

[299] Rule 201 generally requires trading centers to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent the execution or display of a short sale at an impermissible price when a stock has triggered a circuit breaker by experiencing a price decline of at least 10% in one day. Once the circuit breaker in Rule 201 has been triggered, the price test restriction will apply to short sale orders in that security for the remainder of the day and the following day, unless an exception applies. *See* 17 CFR 242.201(b)(1). One exception is for the execution or display of a short sale order marked ''short exempt.'' *See* 17 CFR 242.201(b)(1)(iii)(B); 17 CFR 242.201(c).

[300] *See* Proposing Release, 88 FR 3786 at 3806 (Jan. 20, 2023).

[301] *See* Nasdaq Letter at 43–44.

[302] NYSE Letter at 8.

[303] *See* Virtu Letter II at 3; Robinhood Letter at 45–46.

[304] *See* Joy Letter.

[305] *See* FIF Letter at 12.

[306] *See* Proposing Release, 88 FR 3786 at 3806 (Jan. 20, 2023). *See also infra* note 1172 and accompanying text.

[307] *See* final 17 CFR 242.600(b)(27).

therefore be excluded from the definition of ''covered order.'' In addition, including non-exempt short sale orders for which a price test restriction is not in effect within the scope of Rule 605 reports will lead to a more complete picture of reporting entities' execution quality.[308] As discussed further below, the prior staff statements that conflict with the Commission's adopted position will be rescinded.[309]

B. Required Information

1. Categorization by Order Size

(a) Proposed Approach

Prior to the amendments, Rule 605 reports utilized order size categories based on the numbers of shares in the order (*e.g.,* 100–499 shares and 500–1,999 shares). Historically, round lots generally have been viewed as groups of 100 shares, and Rule 605 prior to these amendments reflected this: it did not require reporting of orders smaller than 100 shares, including odd-lot orders or fractional share orders (*i.e.,* orders for less than one share).[310] Additionally, preexisting Rule 605 reports did not include orders with a size of 10,000 shares or greater, pursuant to exemptive relief provided by the Commission in 2001.[311]

The Commission proposed to amend the definition of ''categorized by order size'' to designate the following categories for order sizes: (i) less than 1 share; (ii) odd-lot; (iii) 1 round lot to less than 5 round lots; (iv) 5 round lots to less than 20 round lots; (v) 20 round lots to less than 50 round lots; (vi) 50 round lots to less than 100 round lots; and (vii) 100 round lots or greater.[312] The proposed modifications to the order size categories would have utilized the new definition of round lot adopted in the Market Data Infrastructure rule (the ''MDI Rules''),[313] and included odd-lots, fractional shares (*i.e.,* orders for less than one share), and larger order sizes.[314]

(b) Final Rule and Discussion

In response to comments, the Commission is adopting a definition of ''categorized by order size'' that differs from the proposal's focus on round lot increments. Instead, as adopted, each order size category reflects a notional dollar value range, along with an indication that the category reflects orders that were for an odd-lot, a round lot, or less than a share. As adopted, this amendment will increase transparency regarding distribution of order sizes that a reporting entity handles, particularly for higher-priced stocks. The Commission also is adopting an execution quality statistic for cumulative notional order size of covered orders.

Individual investors generally supported the proposed order size categories.[315] Some individual investors stated that these categories would help them achieve investor confidence or better executions.[316] Another individual investor stated that reporting execution quality information across orders of different sizes would be ''incredibly beneficial'' to understanding the ''degree of fairness in the market.'' [317] An investor advocacy group supported the proposed changes to the definition of categorized by order size.[318] But one broker-dealer stated that ''because the Commission has simultaneously submitted for proposal a new rule that would change tick sizes and round lot definitions'' (*i.e.,* the Minimum Pricing Increments Proposing Release),[319] the reporting requirements pertaining to categorization by order size ''are subject to change which in turn could create customer confusion.'' [320]

Other commenters addressed specific elements of the proposed order size categories. An investor advocacy group supported basing the order size categories on round lots, stating that doing so not only would harmonize Rule 605 disclosure with the MDI Rules [321] that established a price-based definition of ''round lot'' but also would better enable Rule 605 reports to group orders in a way that provides useful order execution information.[322] However, a number of commenters suggested using notional dollar value categories instead of or in addition to the share-based categories.[323]

Similarly, several commenters, including a broker-dealer and financial services firms, suggested using notional size categories rather than round lot-based size categories.[324] One of the financial services firms stated that ''the process for assigning the number of shares per round lot per security is not

[308] *See* Proposing Release, 88 FR 3786 at 3806 (Jan. 20, 2023).

[309] *See infra* section VI. As stated earlier, when a short sale price test restriction is in place for the security, a short sale order not marked ''exempt'' generally would continue to be subject to special handling and generally would be excluded from the definition of covered order and thus from Rule 605 reporting. *See supra* note 300 and accompanying text. At this time, no further guidance concerning additional order types that require ''special handling'' is required because it is not possible for the Commission to provide an exhaustive list of the types of orders that may be considered ''special handling'' and no specific questions regarding whether particular order types should be considered ''special handling'' have been raised.

[310] There are a variety of circumstances in which an order for an NMS stock submitted to a broker-dealer results in a fractional share. Examples include customer orders to buy: (1) a fraction of a share (*e.g.,* order to buy 0.5 shares); (2) shares with a fractional component (*e.g.,* order to buy 10.5 shares); and (3) a dollar amount that leads to the purchase of a fractional share (*e.g.,* order to buy $1,223 worth of XYZ stock at $50 per share or 24.46 shares).

[311] *See* Large Order Exemptive Letter.

[312] *See* Proposing Release, 88 FR 3786 at 3807 (Jan. 20, 2023); proposed Rule 600(b)(19).

[313] For NMS stocks priced $250.00 or less per share, a round lot will be 100 shares; for NMS stocks priced $250.01 to $1,000.00 per share, a round lot will be 40 shares; for NMS stocks priced $1,000.01 to $10,000.00 per share, a round lot will be 10 shares; and for NMS stocks priced $10,000.01 or more per share, a round lot will be 1 share. *See* prior 17 CFR 242.600(b)(82); MDI Adopting Release, 86 FR 18596 at 18617 (Apr. 9, 2021). Separately, the Commission proposed to accelerate the implementation of the round lot definition. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80270 (Dec. 29, 2022). The Commission established a phased transition plan for the implementation of the MDI Rules, which provided for the implementation of the round lot definition as part of the final phase of implementation. *See* MDI Adopting Release, 86 FR 18596 at 18698–701 (Apr. 9, 2021). At a minimum, round lot implementation will be two years after the Commission's approval of the plan amendment(s) required by 17 CFR 242.614(e) (''Rule 614(e)''). Until the round lot definition adopted pursuant to the MDI Rules is implemented, round lots continue to be defined in exchange rules. *See id.* at 16738. For most NMS stocks, a round lot is defined as 100 shares.

[314] The Commission proposed to rescind the exemptive relief for orders of 10,000 or more shares and include these orders within the scope of Rule 605 reports. *See* Proposing Release, 88 FR 3786 at 3808 (Jan. 20, 2023).

[315] *See, e.g.,* Welch Letter (supporting the inclusion of fractional, odd-lot, and large size orders); Abanes Letter; Macarthur Letter.

[316] *See* Joy Letter (stating that the ''inclusion of fractional shares [and] odd-lots are also essential in the provided data as these are the most commonly used orders by retail'' and that including these order size categories ''provides retail more information confidence to invest more frequently with smaller order sizes''); letter from Art. R Medina (Dec. 26, 2022) (''Medina Letter'') (stating that the proposed new size categories would ''help for better execution in the lit market exchanges'' and ''help these systems better execute customer orders for broker-dealers and ensure competition'').

[317] *See* letter from Creighton Bledsoe (Feb. 28, 2023) (''Bledsoe Letter'').

[318] *See* Healthy Markets Letter at 17.

[319] *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 (Dec. 29, 2022).

[320] Tastytrade Letter at 5.

[321] *See supra* text accompanying note 313 (defining MDI Rules).

[322] *See* Better Markets Letter at 6.

[323] *See* SIFMA Letter II at 32; Angel Letter at 2; Schwab Letter II at 33; Fidelity Letter at 9; Rule 605 Citadel Letter at 6. Further, an academic recommended using dollar rather than share amounts and stated that ''[r]ound lots are obsolete.'' Angel Letter at 2.

[324] *See* Schwab Letter II at 33, Fidelity Letter at 9, Rule 605 Citadel Letter at 6. When discussing a potential average notional order size metric for the summary report, one of these broker-dealers stated that notional size is measured by multiplying the number of shares by the midpoint at the time of order entry. *See* Schwab Letter III at 3. In addition, an industry group stated that notional value should be based on the midpoint at the time of order receipt. *See* FIF Letter II at 11. *See also infra* notes 792 and 793 and accompanying text.

dynamic enough to make this a meaningful delineation.'' [325] In addition, according to this commenter, ''after the size of an order has achieved round lot status, there is no intrinsic difference in the size of the order until it reaches 10,000 shares or $200,000,'' and therefore ''bucketing by round lots has no application to the broader market structure.'' [326] Another financial services firm stated that creating order size categories based on notional dollar amounts would provide investors with clearer views of the execution experiences associated with their orders.[327] A broker-dealer stated that grouping orders by notional size would allow for a more accurate comparison of execution quality.[328]

Two industry groups also recommended grouping orders based on their notional dollar values.[329] One of these industry groups stated that in 2018 and 2019 it had recommended a set of notional size buckets for Rule 605 reporting.[330] This commenter suggested that the Commission utilize CAT data to conduct an analysis similar to the one conducted by IHS Markit for Q1 2018 ''to determine whether [those] notional value categories would still be appropriate or whether these notional value categories should be adjusted.'' [331] This commenter also specifically suggested that one of the thresholds separating notional value categories be $200,000.[332] The other industry group supported revising Rule 605 to utilize notional buckets for the order size categorizations instead of, or in addition to, using the number of round lots as proposed.[333] This commenter recommended that the Commission ''calculate appropriately informative notional size buckets.'' [334]

A national securities exchange suggested using the following notional value buckets rather than share size categories: less than $10,000; $10,000 to less than $50,000; $50,000 to less than $100,000; $100,000 to less than $200,000; and $200,000 to $400,000.[335] This commenter stated that this alternative would avoid the drawbacks of the current order size categories based on number of shares while ensuring coverage of most retail trades.[336]

To address the Commission's concern that defining order size buckets according to notional dollar values would no longer produce a meaningful distinction between round lot and odd-lot orders, one industry group suggested adding a column to the Rule 605 report to signify whether the orders in the applicable row are round lot or odd-lot orders.[337] This commenter also recommended that mixed lot orders be classified as round lot orders for purposes of Rule 605 reporting.[338] Another industry group and a broker-dealer recommended distinguishing round lot and odd-lot orders using a separate flag.[339]

Several individual investor commenters supported the proposed inclusion of odd-lot and fractional share orders in Rule 605 reports.[340] A group of academics stated that odd-lots currently account for over 60% of trades [341] and, under current disclosure requirements, retail traders are unable to evaluate market center execution quality for a majority of their trades.[342] These commenters also stated that fractional share market orders receive widely different price improvement across broker-dealers and full share price improvement statistics are not informative for the execution quality of fractional trades.[343] These commenters stated that these factors justify adding fractional and odd-lot trades to Rule 605 reports.[344] A broker-dealer similarly supported the proposed new category for fractional share orders as well as a category for orders from one share to 99 shares.[345] Another broker-dealer also supported including odd-lot orders in Rule 605 reports and stated this would particularly benefit retail investors seeking to accurately assess execution quality delivered by wholesale broker-dealers.[346]

Explaining that when a round lot or odd-lot order has a fractional share component, the time to execution and execution price may be impacted, one industry group recommended that: (1) fractional share orders (*i.e.,* orders for less than one share) be reported separately from round lot and odd-lot orders; and (2) round lot and odd-lot orders be broken-out further to differentiate between those orders that have, and do not have, a fractional share component.[347] However, another industry group suggested eliminating the requirement to include orders for fractional shares in Rule 605 reports, contending that ''this information is of limited value to investors.'' [348] This commenter stated that ''[t]here is also no clear way to execute fractional shares in a purely agency capacity'' and, ''[a]s a result, to the extent fractional share orders are required to be included in Rule 605 reports, any broker-dealer, even a small broker-dealer, that wanted to facilitate a fractional share order for its customer would be considered a market center for purposes of Rule 605.'' [349] Additionally, this commenter stated that ''much of today's market infrastructure does not yet support fractional share trading'' and the ''costs to fully modify this infrastructure would

[325] Schwab Letter II at 33. This commenter stated that the ''price of a stock can vary dramatically in the three-month period in which the round lot size is set,'' so an intent to approximate the notional order size by the round lot category would ''frequently fail.'' *Id.*

[326] *Id.*

[327] *See* Fidelity Letter at 9. This commenter stated that notional sizes would: (1) be more easily compared over time as lot sizes change or stocks splits occur; and (2) provide ''a more representative view of the cost to implement different types of trades and [be] more consistent with increased market use of fractional/notional trading.'' *Id.*

[328] *See* Rule 605 Citadel Letter at 6.

[329] *See* SIFMA Letter II at 32; FIF Letter at 14–15.

[330] *See* FIF Letter at 14–15. This commenter also stated that it was providing information on the percentage of orders that fell within each notional value category, as estimated by IHS Markit for Q1 2018. *See id.* at 15. Specifically, the notional size buckets and associated percentage of orders were as follows: (1) $1 to $999 (33%); (2) $999 to $4,999 (29%); (3) $5,000 to $19,999 (24%); (4) $20,000 to $49,999 (8%); and (5) $50,000 to $500,000 (6%). *See id.* at 14–15.

[331] Id. at 15. As discussed below, consistent with this commenter's recommendation, the Commission analyzed current CAT data to establish the notional size buckets it is adopting.

[332] *See id. See also infra* note 353 and accompanying text.

[333] *See* SIFMA Letter II at 32.

[334] *Id.* This commenter suggested that, for example, the Commission could use the notional buckets recommended by the first industry group in 2019. *See id.* at 32, n.78 and accompanying text (citing a letter to Brett Redfearn, Director, Division of Trading & Markets, Commission, from Christopher Bok, Financial Information Forum (Jan. 30, 2019), *available at https://www.sec.gov/comments/s7-02-10/s70210-5002077-182848.pdf*).

[335] *See* Nasdaq Letter at 46.

[336] *See id.* at 44.

[337] *See* FIF Letter at 15.

[338] *See id.*; FIF Letter II at 3.

[339] *See* SIFMA Letter II at 32; Rule 605 Citadel Letter at 6. A group of academics also recommended having a separate entry solely for round lot trades, which they said accounts of a large fraction of trade sizes and dollar values. *See* Professor Schwarz et al. Letter at 5.

[340] *See, e.g.,* Pritchard Letter; Welch Letter; Macarthur Letter; Genco Letter; Cesar Letter; Joy Letter.

[341] *See* Professor Schwarz et al. Letter at 3.

[342] *See id.* at 4.

[343] *See id.*

[344] *See id.*

[345] *See* Virtu Letter II at 3.

[346] *See* Rule 605 Citadel Letter at 11.

[347] *See* FIF Letter at 15; FIF Letter II at 3. This commenter recommended that orders be broken out into the following categories within each notional value range because orders in each of these categories have distinct execution characteristics: round lot without fractional component; round lot with fractional component; odd-lot without fractional component; odd-lot with fractional component; and fractional (less than one share). *See* FIF Letter II at 3. According to the commenter, if these five categories are separately reported for each notional value range, reporting based on the number of shares would not provide any material value for market participants. *See id.*

[348] SIFMA Letter II at 31.

[349] *Id.*

be high compared to the minimal benefit of including fractional share reporting.'' [350]

With respect to the proposed inclusion of larger-sized orders, a commenter stated that a ''natural breakpoint'' between size categories exists at $200,000 and suggested establishing a size bucket of $200,000 and greater.[351] Another commenter supported the proposed order size category for orders greater than 10,000 shares.[352] An industry group recommended designating one of the thresholds for separating notional value categories at $200,000 because in the Order Competition Rule Proposing Release the Commission proposed to utilize a $200,000 threshold for an exception from the obligation to submit a segmented order to a qualified auction.[353] A national securities exchange stated that the Commission should ''consider increasing the current cap of $200,000 [the notional block size], as this benchmark has not changed with the market or inflation over time.'' [354] This commenter stated that increasing the cap may provide ''information that is helpful for institutional buyers.'' [355]

Taking into consideration the comments received, the Commission is adopting a modified definition of ''categorized by order size.'' The Commission followed the suggestion that it use CAT data to examine which notional order size buckets would be appropriate.[356] Based on this analysis (discussed below), the Commission is adopting order size categories that utilize the following notional dollar value ranges: (i) less than $250; (ii) $250 to less than $1,000; (iii) $1,000 to less than $5,000; (iv) $5,000 to less than $10,000; (v) $10,000 to less than $20,000; (vi) $20,000 to less than $50,000; (vii) $50,000 to less than $200,000; and (viii) $200,000 or more.[357]

Each adopted order size category reflects one of these notional dollar value ranges, along with an indication that the orders were for an odd-lot, a round lot, or less than a share.[358] Accordingly, as adopted, ''categorized by order size'' means dividing orders into separate categories for the following sizes:

- Less than $250 and less than a share;
- Less than $250 and odd-lot;
- Less than $250 and at least a round lot;
- $250 to less than $1,000 and less than a share;
- $250 to less than $1,000 and odd-lot;
- $250 to less than $1,000 and at least a round lot;
- $1,000 to less than $5,000 and less than a share;
- $1,000 to less than $5,000 and odd-lot;
- $1,000 to less than $5,000 and at least a round lot;
- $5,000 to less than $10,000 and less than a share;
- $5,000 to less than $10,000 and odd-lot;
- $5,000 to less than $10,000 and at least a round lot;
- $10,000 to less than $20,000 and less than a share;
- $10,000 to less than $20,000 and odd-lot;
- $10,000 to less than $20,000 and at least a round lot;
- $20,000 to less than $50,000 and less than a share;
- $20,000 to less than $50,000 and odd-lot;
- $20,000 to less than $50,000 and at least a round lot;
- $50,000 to less than $200,000 and less than a share;
- $50,000 to less than $200,000 and odd-lot;
- $50,000 to less than $200,000 and at least a round lot;
- $200,000 or more and less than a share;
- $200,000 or more and odd-lot; and
- $200,000 or more and at least a round lot.[359]

As discussed further below, the adopted categories will facilitate market participants' ability to compare across orders of different sizes in higher-priced stocks, while controlling for potential differences in the treatment of larger-sized orders. Additionally, the adopted buckets better account for potential differences in the distribution of order sizes that reporting entities typically handle for a given stock when comparing execution quality metrics across reporting entities, facilitating apples-to-apples comparisons of execution quality across reporting entities.

For purposes of the order size categories, a mixed lot order (*i.e.,* an order for an amount of shares greater than a round lot that is not a multiple of such round lot) will be grouped in the ''at least a round lot'' category and an order for an odd-lot with a fractional share component or a round lot with a fractional share component will be grouped with other odd-lots or round lots, respectively.[360] Reporting entities generally should calculate a limit order's notional value by multiplying the number of shares by the order's limit price. In addition, reporting entities generally should calculate a market order to buy's notional value by multiplying the number of shares by the national best offer at the time of order receipt and a market order to sell's notional value by multiplying the number of shares by the national best bid at the time of order receipt.[361] Calculation of the notional value of a stop order generally should follow these principles based on whether the order once triggered is a limit order or a market order, except that the notional value of a stop market order should be based upon the national best bid or national best offer at the time the order is triggered rather than the time of order receipt.

The Commission used CAT data to examine the distribution of orders

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[350] *Id.* This commenter stated as an example that ''FINRA does not currently have a mechanism to report fractional share trades, because all of these trades are rounded up today.'' *Id.*

[351] *See* Schwab Letter II at 33.

[352] *See* Virtu Letter II at 3.

[353] *See* FIF Letter at 14–15.

[354] Nasdaq Letter at 46.

[355] *Id.*

[356] *See supra* note 331 and accompanying text. *See also supra* note 334 and accompanying text (suggesting that the Commission calculate appropriate notional size buckets).

[357] *See infra* Figure 16 and Figure 17. In aggregate, order flow appears reasonably well-distributed across the various notional order size buckets that the Commission is adopting, with the exceptions of the smallest size bucket (orders for $250 or less) and the largest size bucket (orders for $200,000 or more), both of which have little order flow. *See infra* Section IX.D.1.b)(2)(a)(i). The Commission is adopting these notional order size buckets for the reasons described below.

[358] Some commenters suggested utilizing a column or a flag to designate whether orders in a particular row are odd-lots or round lots. *See supra* notes 337–339 and accompanying text. Instead, the Commission is incorporating into the defined order size categories whether an order is for a round lot, odd-lot, or less than a share for ease of application. The two approaches have the same substantive effect of having a single row representing each possible combination of round lot, odd-lot, and fractional share with each notional value size range.

[359] *See* final 17 CFR 242.600(b)(18). The adopted categories address the concern expressed by a commenter that the proposed categories, which were based on round lots (and also included categories for orders for less than one share and for odd-lots), may cause confusion because the definition of round lot may change. *See supra* note 320 and accompanying text.

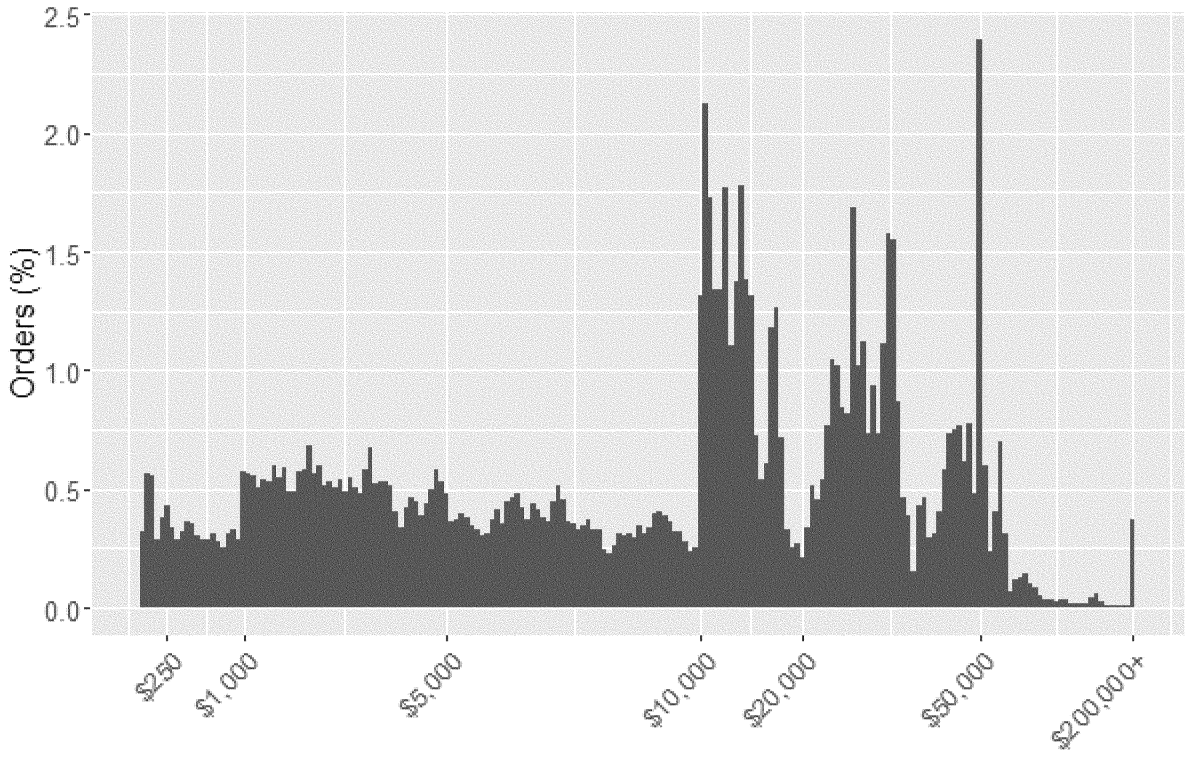
[360] *See* final 17 CFR 242.600(b)(18).

[361] The Commission does not agree with the commenters' suggestion that notional value of an order generally should be calculated based on the midpoint of the national best bid and national best offer at time of order receipt. *See supra* note 324. The order size categories reflect the order from the perspective of the order submitter. Likewise, calculating an order's notional value for purposes of categorization by order size by referencing the limit price for a limit order or the far touch for a market order generally should better reflect the order submitter's expectation of the order's notional value.

across a granular set of notional order size buckets to determine which breakpoints form the most appropriate notional order size buckets. Figure 1 presents the distribution of orders across the notional order size buckets and shows that orders tend to be clustered around certain round notional values (*e.g.,* $100, $1,000, $10,000, and $50,000).

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Figure 1: Distribution of Orders Across Notional Order Size Buckets, Q1 2023



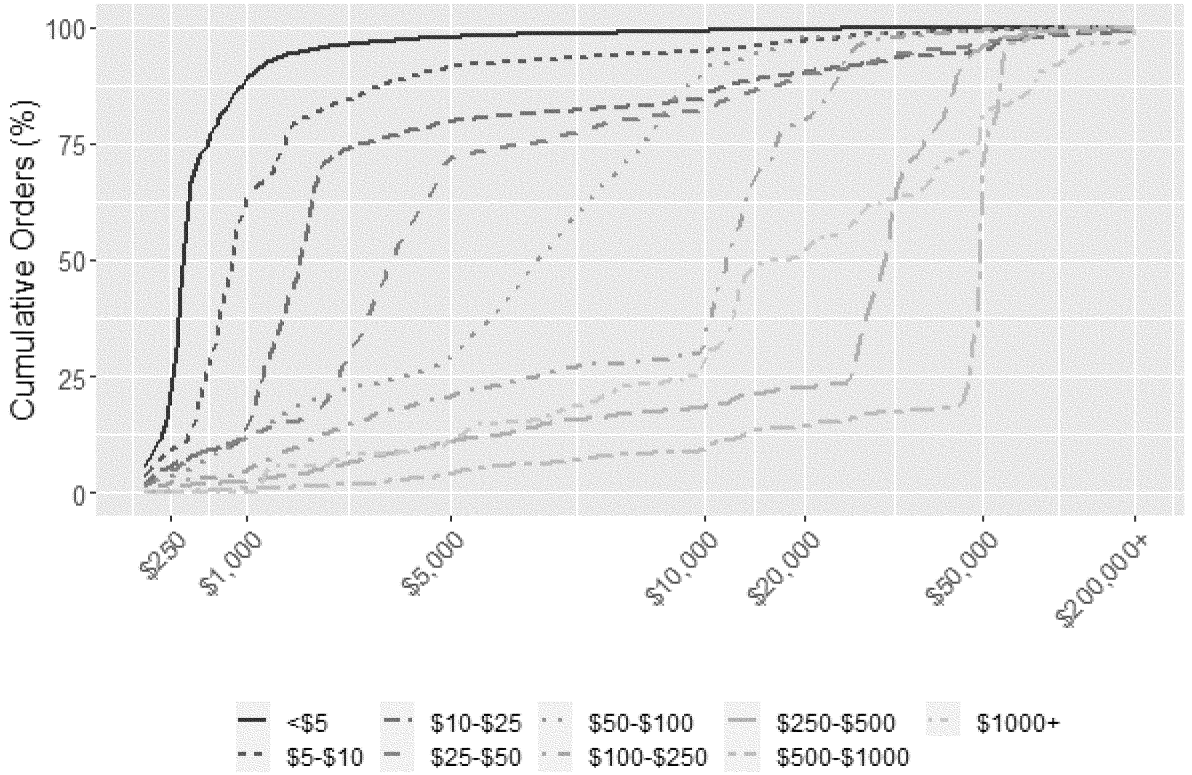
This figure shows the distribution of orders (as a percent of total orders) across notional order size buckets. Percentages are calculated as the number of submitted orders within each order size bucket, summed across all stocks and days in the sample, divided by the total number of submitted shares summed across all stocks and days. This analysis uses data from CAT for a sample of 400 stocks for Q1 2023. See infra note 1261 for a description of this dataset. The 196 notional order size buckets were determined as follows: For orders between $0 and $1,000, notional order size buckets were set in increasing $50 increments (i.e., less than $50, from $50 to less than $100, from $100 to less than $150, etc.). For orders between $1,000 and $10,000, order size buckets were set in increasing $100 increments. For orders between $10,000 and $25,000, order size buckets were set in increasing $500 increments. For orders between $25,000 and $50,000, order size buckets were set in increasing $1,000 increments. For orders between $50,000 and $200,000, order size buckets were set in increasing $5,000 increments.

When trying to determine the optimal cut-off points between notional order size buckets, the Commission considered how the order size buckets selected could meaningfully capture variations in order sizes across a variety of different factors, including stock prices, market centers, lot type and order share size categorization (*i.e.,* round lot, odd-lot, and fractional share orders). Based on its analysis, the Commission makes the following observations about the types of variations in order characteristics that will be captured by the adopted order size buckets. First, Figure 2 below presents the cumulative order flow (as a percentage of total orders) across notional order size buckets. These results show that, for stocks priced less than $5,[362] 87.6% of orders are valued below $1,000 and 66.9% of orders are valued below $500. Given that nearly a quarter of stocks are priced below $5, including a set of smaller notional order size buckets (*i.e.,* less than $250; and $250 to less than $1,000) will help ensure that orders are meaningfully distributed across order size categories and not clustered within a single category. Additionally, odd-lot orders tend to be valued less than $1,000, so the smaller notional order size buckets are useful for capturing the distribution of odd-lot orders specifically.[363]

[362] This number is based on an analysis of the volume-weighted average price (''VWAP'') calculated for each stock during normal trading hours for Q1 2023 using data from WRDS Intra-Day Indicators.

[363] Based on an analysis of the CAT data described in note 1261 infra, 17.4% of odd-lot orders are valued below $1,000, and for stocks priced less than $50 (which represent 85% of all stocks), this percentage increases to 68.9%.

Figure 2: Cumulative Order Flow across Notional Order Size Buckets, by Stock Price, Q1 2023



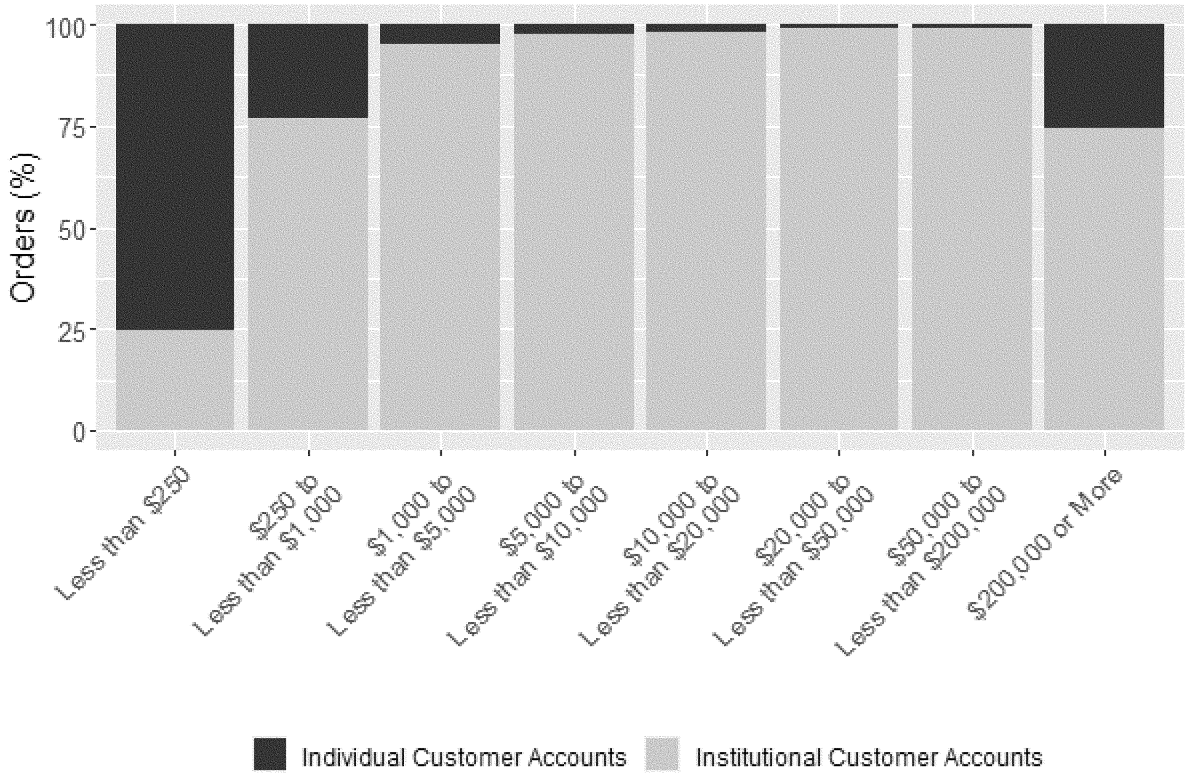
This figure shows the cumulative percentage of orders across notional order size buckets for stocks grouped according to average stock prices. Percentages are calculated as the cumulative number of submitted orders within each size bucket, summed across all stocks within a given price group and across all days in the sample, divided by the total number of submitted orders summed across all stocks within a given price group and across all days in the sample. This analysis uses data from CAT for a sample of 400 stocks for Q1 2023. See infra note 1261 for a description of this dataset. Stocks were grouped according to their average share price over the sample period. The 196 notional order size buckets were determined as follows: For orders between $0 and $1,000, notional order size buckets were set in increasing $50 increments (i.e., less than $50, from $50 to less than $100, from $100 to less than $150, etc.). For orders between $1,000 and $10,000, notional order size buckets were set in increasing $100 increments. For orders between $10,000 and $25,000, notional order size buckets were set in increasing $500 increments. For orders between $25,000 and $50,000, notional order size buckets were set in increasing $1,000 increments. For orders between $50,000 and $200,000, notional order size buckets were set in increasing $5,000 increments.

Second, orders valued below $250 contain a higher percentage of individual investor orders than higher-valued orders. To proxy for small individual investor orders, the Commission analyzed the distribution of non-IOC orders that are valued less than $1,000 and that originate from Individual Customer [364] accounts and are handled by wholesalers.[365] The Commission found that 54.2% of these orders are valued less than $250. Furthermore, 99.7% of fractional orders for less than a share, the majority of which are originated from Individual Customer accounts, are valued less than $250. Figure 3 below shows the breakdown of orders originating from Individual and Institutional Customer account types and shows that nearly three-fourths of orders valued under $250 originate from Individual Customers. Therefore, a separate notional order size category for orders valued less than $250 will be particularly useful in allowing individual investors to compare the execution quality of their orders across reporting entities.

[364] *See infra* note 1144 for a description of an ''Individual Customer'' account.

[365] This proxy was employed for two reasons. First, it was utilized because a high percentage of individual investors' orders are handled by wholesalers. *See* Proposing Release, 88 FR 3786 at 3839, n.614 (Jan. 20, 2023) (describing a Commission analysis of Rule 606 reports that showed that, in Q1 2022, a sample of 46 retail broker-dealers routed 87.3% of orders in S&P 500 stocks and 87.9% of orders in non-S&P 500 stocks to wholesalers, as compared to 9.1% and 8.5%, respectively, to national securities exchanges). Second, it was utilized because it is the Commission's understanding that IOC orders handled by wholesalers are likely to be orders directed to wholesaler SDPs. *See* infra note 1110. Based on an analysis of the CAT data described in in note 1261 infra, non-IOC orders that are valued less than $1,000 and that originate from Individual Customer accounts make up around 10.2% of wholesalers' total order flow.

Figure 3: Percentage of Individual and Institutional Customer Orders, by Notional Order Size Bucket, Q1 2023



This figure shows the percentage breakdown of orders originating from either individual customer accounts or institutional customer accounts. Percentages are calculated as the number of submitted orders within each order size bucket that originated from a given account type, summed across all stocks and days in the sample, divided by the total number of submitted orders within each order size bucket, summed across all stocks and days. This analysis uses data from CAT for a sample of 400 stocks for Q1 2023. See infra note 1261 for a description of this dataset. See infra note 1144 for a description of account types in CAT.

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Third, for stocks priced less than $50 (which, again, represent 85% of all stocks [366]), 68.0% of orders are valued between $1,000 and $10,000. Two of the adopted notional order size buckets ($1,000 to less than $5,000; and $5,000 to less than $10,000) will capture some variation across the majority of orders for the majority of stocks.

Fourth, 69.6% of round lots have relatively higher notional order sizes of between $10,000 and $200,000. In addition, some market centers seem to specialize in larger orders. For example, 63.3% of order flow to ATSs is valued between $10,000 and $200,000. The remaining adopted notional order size buckets ($10,000 to less than $20,000; $20,000 to less than $50,000; and $50,000 to less than $200,000) capture the distributions of these larger notional value orders, and thus allow for measurement of execution quality at market centers that specialize in larger notional value order sizes.

Lastly, the additional notional order size category for orders for valued $200,000 or more will be useful because these orders typically warrant different treatment than smaller orders.[367]

Designating order size categories based on notional order size buckets represents a shift in approach from the proposed order size categories based on round lot size ranges. In the Proposing Release, the Commission stated that modifying the order size categories to reflect the number of round lots would better allow Rule 605 reports to group orders with similar characteristics and notional values, and thereby provide more useful execution quality information.[368] The Commission also stated its belief that notional buckets and caps would not be necessary because the definition of round lot, as modified by the MDI Rules, incorporates the current market price of the security.[369] However, the Commission requested and, as described above, received, comments supporting the use of order size categories based on

[366] *See supra* note 363.

[367] *See, e.g.*, 17 CFR 242.606(a)(1) (requiring reports on the routing of customer orders) and prior 17 CFR 242.600(b)(25) (defining ''customer order'' to exclude an order with a market value of $200,000 or more); 17 CFR 242.604(b)(4) (providing an exception for orders of block size from required limit order display) and prior 17 CFR 242.600(b)(12) (defining ''block size'' as, in part, an order for a quantity of stock having a market value of at least $200,000). In addition, the adopted rule is consistent with the recommendations by two commenters to establish a $200,000 threshold and to increase the cap above $200,000. *See supra* notes 353 and 354 and accompanying text.

[368] *See* Proposing Release, 88 FR 3786 at 3807 (Jan. 20, 2023).

[369] *See id.*

notional value.[370] In the Proposing Release, the Commission recognized advantages to defining order size categories based on dollar value of the order, while also recognizing that this approach would no longer produce a meaningful distinction between round lot and odd-lot orders according to the new definitions under the MDI Rules and therefore it would not be possible to distinguish orders that may not be at the same price as quotes protected under 17 CFR 242.611 (''Rule 611'').[371] Many commenters favored utilizing order size categories based on notional dollar value.[372] Further, accepting commenters' suggestion to combine notional dollar value ranges with an indication of whether a category represents round-lot orders and odd-lot orders,[373] and also indicating whether a category represents orders of less than a share, will preserve the ability to distinguish between such orders.[374] Designating order size categories according to notional value and whether the order represents a round lot, an odd-lot, or an order smaller than a single share preserves the comparability of order execution quality statistics within an order size category and is responsive to comments.[375]

In addition, in response to commenters' suggestions that the statistics in the summary report should be derivable from the detailed report,[376] the Commission is adding a metric to the detailed report under Rule 605(a)(1) for the cumulative notional order size of all covered orders.[377] Specifically, users of the detailed reports can use the cumulative notional order size metric to calculate average notional order size, which is a metric in the summary report, and thus either reconstruct a firm's calculations in its summary report or calculate the metric for different combinations of orders.[378] Users of the detailed report also can use the cumulative notional order size metric to calculate the average share price for covered orders received by combining the metric with shares submitted. Further, the cumulative notional order size metric provides information to users of the detailed report regarding whether the orders that the reporting entity received are more heavily weighted towards the higher or the lower end of a notional order size range.

For the reasons discussed in the Proposing Release and as described below, the Commission continues to believe that fractional, odd-lot, and larger-sized orders of 10,000 or more shares represent important order flow segments.[379] By incorporating these orders into the new order size categories, Rule 605 reports will contain information about some orders that were previously missing from Rule 605 reports. The Commission disagrees with the commenter that stated that execution quality information for fractional share orders is of limited value to investors and suggested not including such orders in Rule 605 reports.[380] Fractional share orders have become increasingly popular with individual investors and the Commission continues to believe that it is important to provide standardized execution quality metrics for this segment of order flow.[381] Analysis of CAT data from August 2023 found that executed orders with a fractional share component originated from almost five and a half million unique accounts. Further, orders for less than a single share represented a significant portion of fractional order executions.[382] While fractional share orders continue to represent a small percentage (around 4.1%) of originating orders that eventually execute, they represent a significant percentage (21.6%) of order executions originating from individual accounts.[383]

With respect to the commenter's statement that the cost of modifying market infrastructure to accommodate fractional share trading ''would be high compared to the minimal benefit'' of including fractional shares in Rule 605 reports,[384] this commenter has not provided data to quantify the projected increased costs. Although this commenter provides as an example of potential infrastructure issues that FINRA ''does not currently have a mechanism to report fractional share trades, because all of these trades are

[370] *See id.* at 3809.

[371] *See id.* at 3891–92 (describing reasonable alternative to define order sizes based on dollar volume categories rather than number of round lots).

[372] *See supra* notes 323–335 and accompanying text.

[373] *See supra* notes 337–339 and accompanying text.

[374] One commenter supported the proposed order sized definitions in part because they would harmonize Rule 605 disclosures with the price-based definition of round lot from the MDI Rules. *See supra* note 322. Because the adopted order size categories combine notional value with an indication of whether the order was a round lot, odd-lot, or order less than a share, the order size categories will reflect the price-based definition of round lot when it is implemented.

[375] The Commission disagrees with a commenter's statement that the reporting requirements relating to order size categories are subject to change and thus could create confusion because of the changes being proposed in the Minimum Pricing Increments Proposing Release. *See supra* notes 319–320 and accompanying text. The Minimum Pricing Increments Proposing Release includes a proposal to accelerate the implementation of the round lot definition adopted under the MDI Rules that will assign NMS stocks priced over $250 to round lot sizes smaller than 100 shares. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80270 (Dec. 29, 2022). Although the new round lot definition when implemented will be dynamic and lead to changes in the round lot for stocks priced over $250, market participants will have notice of these changes. Further, the use of notional value in the adopted order size categories will help users of Rule 605 reports understand the effect of a change in round lot size for a security because a notional value range will remain constant even if the size of a round lot changes. Moreover, it is not clear, and the commenter does not explain, how the proposals to modify tick sizes in the Minimum Pricing Increments Proposing Release would potentially affect Rule 605's requirements concerning categorization by order size.

[376] *See infra* note 769 and accompanying text. One commenter specifically recommended ''adding to the [605](a)(1) report the aggregate notional value of covered orders for each row.'' *See* FIF Letter II at 11.

[377] *See* final 17 CFR 242.605(a)(1)(i)(B) (requiring the reporting of the cumulative notional value of covered orders for all order types).

[378] *See* final 17 CFR 242.605(a)(2)(ii). *See also infra* note 796 and accompanying text (discussing the average notional order size metric in the summary report).

[379] *See* Proposing Release, 88 FR 3786 at 3808 (Jan. 20, 2023). The Commission is rescinding the portion of the Large Order Exemptive Letter that grants the Large Order Exemptive Relief because it is inconsistent with, and will be obsolete in light of, the new order size categories. *See infra* section VI for further discussion.

[380] *See supra* note 348 and accompanying text.

[381] *See* Proposing Release, 88 FR 3786 at 3808 (Jan. 20, 2023). A broker-dealer that principally facilitates the trading of fractional shares must produce a separate Rule 605 report as a market center if it meets the definition of an ''OTC market maker'' and receives covered orders for execution in such capacity. *See* final 17 CFR 242.600(b)(18) (defining ''categorized by order size'' to include categories for orders of less than a share); final 17 CFR 242.600(b)(55) (defining ''market center''); final 17 CFR 242.600(b)(75) (defining ''OTC market maker''); final 17 CFR 242.605(a)(1) (''Every market center . . . shall make available for each calendar month . . . a report on the covered orders in NMS stocks that it received for execution from any person or that it received for execution in a prior calendar month but which remained open.''). *See also supra* note 170 and accompanying text. As discussed below, the inclusion of orders less than one share will expand the number of market centers filing Rule 605 reports, and therefore this change will increase transparency about the execution quality achieved by those market centers. *See infra* notes 1436–1438 and accompanying text.

[382] Analysis of CAT data from Mar. 2022 found that almost 68% percent (31.67 million) of the 46.63 million executed orders with a fractional component were for less than a single share. *See* Proposing Release, 88 FR 3786 at 3808, n.279 (Jan. 20, 2023). Updated analysis from Aug. 2023 found that both the number and percentage of orders for less than a share increased. In Aug. 2023, approximately 81% (54.7 million) of the 67.4 million executed orders with a fractional component were for less than a single share.

[383] This considers any order with a fractional component. However, orders for less than one share still account for over 16% of order executions originating from individual accounts. *See infra* note 1424. Generally, accounts classified as ''individual'' in CAT are attributed to natural persons.

[384] *See supra* note 350 and accompanying text.

rounded up today,'' [385] these trades must still be reported to FINRA's trade reporting facility.[386] Further, CAT accepts reports involving fractional shares.[387] Only market centers or larger broker-dealers that accept orders with fractional shares for execution will need to include fractional shares in their Rule 605 reports, and those firms have the necessary systems to handle fractional shares.[388] Therefore, the Commission does not agree that the cost to implement any modifications to infrastructure needed to provide for the inclusion of fractional shares in Rule 605 reports would be so high as to exceed the benefits of providing standardized execution quality metrics for this segment of order flow.[389]

In addition, the Commission is not adopting the commenter's suggestion that Rule 605 reports also include separate reporting categories for round lot orders with a fractional share component and odd-lot orders with a fractional share component.[390] The majority of orders that have a fractional share component are orders for less than one share and these orders will appear separately in Rule 605 reports in the designated order size category. The value of including an additional category of orders of larger than one share with a fractional share component is unclear.[391] Such orders will be grouped with orders of the same notional size and according to whether the order based on overall share size is an odd-lot or a round lot, which should provide sufficient comparability for such orders.

2. Categorization by Order Type

Rule 605 reports include data for orders as categorized by order type. Prior to the amendments, Rule 605 defined ''categorized by order type'' to mean dividing orders into separate categories for market orders, marketable limit orders, inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders.[392] The Commission proposed to modify this definition: (1) to remove the order type categories for inside-the-quote limit orders, at-the-quote-limit orders, and near-the-quote limit orders; (2) to add order type categories for marketable immediate-or-cancel orders, beyond-the-midpoint limit orders, executable NMLOs (excluding beyond-the-midpoint limit orders and orders submitted with stop prices), and executable orders submitted with stop prices; and (3) to specify that the category for marketable limit orders will exclude immediate or cancel orders.[393]

The Commission received comments supporting the overall changes to order type categories being proposed.[394] Additionally, and as discussed in relevant subsections below, many commenters discussed specific aspects of the proposed changes to the order type categories. The Commission is adopting the amendments to the order type categories, with a few adjustments from the proposal. First, in connection with the proposed order type categories for NMLOs, the Commission is making certain modifications to the proposed definition of executable, as discussed in section III.B.2.a) below. Second, the Commission is retaining a separate order type category for executable beyond-the-midpoint limit orders largely as proposed, with a small expansion in scope and corresponding change to the name of the relevant defined term to refer to them as ''midpoint-or-better limit orders,'' as discussed in section III.B.2.b) below. Finally, the Commission is adopting the proposed order type category for marketable IOCs, while also adding order type categories for two other types of IOCs, as discussed in section III.B.2.c) below.[395]

(a) NMLOs

(1) Proposed Approach

The Commission proposed to eliminate the three separate order type categories pertaining to NMLOs (*i.e.* , inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders) [396] and to replace them with new categories for NMLOs that become executable (excluding orders submitted with stop prices and beyond-the-midpoint limit orders) and beyond-the-midpoint limit orders.[397] The Commission recognized that more meaningful measures of execution quality for NMLOs, as well as orders submitted with stop prices, would assist investors in measuring execution quality, and stated that it was proposing to add the concept of ''executable'' to allow execution quality statistics to be measured from a point where an order could be executed.[398] Specifically, the Commission proposed the following definition of ''executable'' for NMLOs (other than orders submitted with stop prices): for any non-marketable buy order (excluding orders submitted with stop prices), executable means that the limit price is equal to or greater than the national best bid during regular trading hours, and, for any non-marketable sell order (excluding orders submitted with stop prices), that the limit price is equal to or less than the national best offer during regular trading hours.[399] The Commission stated that, as is the case for orders submitted with stop prices, incorporation of the ''executable'' concept would have two effects-NMLOs would only be reported as part of a Rule 605 report if they become executable during regular trading hours and the point that NMLOs first become executable would be used as an input for several execution quality metrics.[400]

(2) Final Rule and Discussion

An individual investor supported the proposed modifications to reporting requirements for NMLOs, stating they would capture more relevant execution

[385] SIFMA Letter II at 31.

[386] *See* FINRA Trade Reporting FAQs, *available at https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq* (''Q101.15: Must trades for less than one share be reported? A101.15: Yes . . . where a trade is executed for less than one share, *e.g.,* ⅓ share, firms should round up and report a share quantity of 1.'').

[387] *See* CAT FAQ B.10 *available at https://catnmsplan.com/faq*.

[388] For example, a broker-dealer that accepts orders with fractional shares for execution will need to provide a trade confirmation to its customer that includes the execution price. In addition, such broker-dealer will need to have the ability to compare the execution price to the NBBO at the time of execution in order to help ensure compliance with the order protection rule. *See* 17 CFR 242.611.

[389] *See infra* notes 1674–1676 and accompanying text (discussing costs and benefits).

[390] *See supra* note 347.

[391] As discussed below, the Commission did not find execution quality to systematically vary significantly between odd-lots and rounds lots with fractional components and their counterparts without fractional components. *See infra* at section IX.E.3.(a)(2).

[392] *See* prior 17 CFR 242.600(b)(14).

[393] *See* Proposing Release, 88 FR 3786 at 3809–12 (Jan. 20, 2023); proposed Rule 600(b)(20).

[394] *See, e.g.,* Better Markets Letter at 6–7; Pritchard Letter; Abanes Letter. An individual investor stated that creation of new order type categories would help improve executions in the lit exchanges and ensure competition among broker-dealers. *See* Medina Letter.

[395] In addition, as discussed in section III.A.2 above, the Commission is subdividing the order type category for executable orders submitted with stop prices and modifying the definition of executable as it pertains to stop orders.

[396] Inside-the-quote limit order, at-the-quote limit order, and near-the-quote limit order mean non-marketable buy orders with limit prices that are, respectively, higher than, equal to, and lower by $0.10 or less than the national best bid at the time of order receipt, and non-marketable sell orders with limit prices that are, respectively, lower than, equal to, and higher by $0.10 or less than the national best offer at the time of order receipt. *See* prior 17 CFR 242.600(b)(37).

[397] *See* Proposing Release, 88 FR 3786 at 3809 (Jan. 20, 2023); proposed Rule 600(b)(20).

[398] *See* Proposing Release, 88 FR 3786 at 3810 (Jan. 20, 2023).

[399] *See id.*; proposed Rule 600(b)(42).

[400] *See* Proposing Release, 88 FR 3786 at 3810 (Jan. 20, 2023).

quality information for these orders.[401] A broker-dealer supported replacing the current NMLO order categories with NMLOs that become executable and beyond-the-midpoint limit orders, and stated that ''[a]dding these new categories should capture many more orders compared to current Rule 605 reports.'' [402] A national securities exchange asked for clarification regarding whether market centers would be permitted to use their own view of the NBBO, data from the securities information processors (''SIPs''), or data from competing consolidators (in the future, pursuant to the MDI Rules) when determining order marketability.[403] Another national securities exchange supported replacing the three current categories for NMLOs with NMLOs that become executable, beyond-the-midpoint limit orders, and executable orders submitted with stop prices and stated that these changes would enhance execution quality information within Rule 605 reports and better group comparable orders.[404] According to a group of academics, some broker-dealers convert their customers' order types and route most of them to the broker-dealer's ATS.[405] These commenters recommended, to provide transparency on order types selected by customers, that Rule 605 statistics reflect the order type selected by customers rather than the routing broker-dealer.[406]

After reviewing the comments, the Commission is eliminating the definition of ''inside-the-quote limit order, at-the-quote limit order, and near-the-quote limit order,'' [407] as proposed and is adopting the order type category for executable NMLOs largely as proposed for the reasons stated in the Proposing Release.[408] As a result, Rule 605 reports will capture more of those NMLOs that have an opportunity to execute, and execution quality statistics will be more useful for these types of NMLOs. However, as discussed above in section III.A.1.b), the Commission is modifying the definition of ''executable'' in response to a comment regarding the treatment of orders received during the interim opening period.[409]

A national securities exchange stated that under the Limit-Up Limit-Down (''LULD'') Plan, certain NMLOs would not necessarily be ''executable'' and requested that the Commission modify the definition of ''executable'' to conform to the provisions of the LULD Plan.[410] The Commission agrees with the commenter that an order generally should not fall within the definition of ''executable'' when the underlying security is in a Straddle State. The market for a security in a Straddle State can substantially differ from the market for that security outside of a Straddle State, as reflected in the fact that the primary listing exchange may declare a trading pause for an NMS Stock in a Straddle State.[411] Even if the primary listing exchange has not declared a trading pause for a security in a Straddle State, the decision to not consider an order executable based on a whether the national best bid or national best offer reaches a specific price at a time when the underlying security is in a Straddle State is consistent with the Commission's decision to include within the scope of Rule 605 reports only those NMLOs that become executable during regular trading hours. The Commission stated that it was only including in Rule 605 reports those NMLOs that become executable during regular trading hours in order to provide a basis for more comparable execution quality measures because there are substantial differences in the nature of the market between regular trading hours and after-hours.[412] Accordingly, for purposes of determining when an order first became executable, an order generally should not become executable during a time when the underlying security is in a Straddle State.[413]

(b) Midpoint-or-Better Limit Orders

(1) Proposed Approach

Inside-the-quote limit orders were a separate order type category under Rule 605 before the amendments,[414] and Rule 605 did not require price improvement statistics to be calculated for these orders because they are not a marketable order type (*i.e.,* they do not fully cross the spread).[415] The Commission proposed to require execution quality statistics for limit orders priced more aggressively than the midpoint and to classify these types of orders as beyond-the-midpoint limit orders.[416] Specifically, the Commission proposed to define a ''beyond-the-midpoint limit order'' as follows: with respect to an order received at a time when a NBBO is being disseminated, (i) any non-marketable buy order with a limit price

[401] *See* Genco Letter.

[402] Rule 605 Citadel Letter at 11.

[403] *See* NYSE Letter at 8. Until the implementation of the MDI Rules, a reporting entity generally should use data from the exclusive SIPs to calculate its Rule 605 statistics, including the determination of whether a limit order is marketable. The MDI Rules include a phased transition plan to implement the decentralization consolidation model, including a parallel operation period followed by the cessation of operations of the exclusive SIPs, which will only cease operations if the Commission approves an amendment to the effective national market system plan(s) to effectuate such a cessation. *See* MDI Adopting Release, 86 FR 18596 at 18700–01 (Apr. 9, 2021). The Commission will monitor the implementation of the decentralized consolidation model required under the MDI Rules.

[404] *See* Nasdaq Letter at 44.

[405] *See* Professor Schwarz *et al.* Letter at 5.

[406] *See id.* Each firm or market center generally should classify orders based on the order type when received. This generates execution quality statistics that are comparable among different types of reporting entities because many of the Rule's statistical measures are based on time of order receipt (or benchmarked to the NBBO when received, for marketable order types). In addition, some receiving market centers or broker-dealers may not have information about the order type when the originating customer entered the order and thus would not have the information needed to classify orders based on the order type selected by the customer.

[407] These terms will no longer be used with the adopted changes to the order type categories, which focus on whether a NMLO becomes executable rather than on how a NMLO's limit price compares to the quote, as discussed further below. The Commission received one comment supporting the elimination of this definition. *See* Nasdaq Letter at 44.

[408] *See* Proposing Release, 88 FR 3786 at 3809–10 (Jan. 20, 2023); final 17 CFR 242.600(b)(19). As discussed further below, the Commission is adopting a new order type category for executable NMLOs that are immediate-or-cancel and thus these orders will not be included within the scope of the order type category for executable NMLOs. *See infra* section III.B.2.c).

[409] *See* final 17 CFR 242.600(b)(39). *See also supra* notes 244–246 and accompanying text.

[410] *See* NYSE Letter at 8–9. This commenter stated that, under the LULD Plan, a security is in a ''Straddle State'' when the national best bid is below the LULD lower price band or the national best offer is above the LULD upper price band and an order is not executable when the underlying security is in a Straddle State. *See id.* at 9, n.12.

[411] *See* Section VII(A)(2) of 20th Amendment to the National Market System Plan to Address Extraordinary Market Volatility (''LULD Plan''). The LULD Plan defines a ''Straddle State'' as when the national best bid (offer) is below (above) the lower (upper) price band and the stock is not in a limit state, and ''trading in that NMS Stock deviates from normal trading characteristics such that declaring a Trading Pause would support the [LULD] Plan's goal to address extraordinary market volatility.'' Id. The primary listing exchange for a stock must have policies and procedures to determine when to declare a trading pause. *See id.*

[412] *See* Proposing Release, 88 FR 3786 at 3810 (Jan. 20, 2023). The Commission is further advancing this goal through the adopted definition of ''executable,'' which additionally specifies that NMLOs will be executable only after the primary listing market has disseminated its first firm, uncrossed quotations in the security. *See* final 17 CFR 242.600(b)(39).

[413] This guidance is based upon the current definition of Straddle State in the LULD Plan, as described above. If this definition changes due to an LULD Plan amendment and the change impacts the guidance provided here, this guidance may no longer be valid.

[414] *See* prior 17 CFR 242.600(b)(14).

[415] Prior Rule 605(a)(1)(i) specified execution quality statistics to be provided for all order types, and prior Rule 605(a)(1)(ii) specified execution quality statistics to be provided for marketable order types. *See* prior 17 CFR 242.605(a)(1)(i) and (ii).

[416] *See* Proposing Release, 88 FR 3786 at 3811 (Jan. 20, 2023).

that is higher than the midpoint of the national best bid and national best offer at the time of order receipt, or (ii) any non-marketable sell order with a limit price that is lower than the midpoint of the national best bid and national best offer at the time of order receipt; and, with respect to an order received at a time when a NBBO is not being disseminated, (i) any non-marketable buy order with a limit price that is higher than the midpoint of the national best bid and national best offer at the time that the national best bid and national best offer is first disseminated after the time of order receipt, or (ii) any non-marketable sell order with a limit price that is lower than the midpoint of the national best bid and national best offer at the time that the national best bid and national best offer is first disseminated after the time of order receipt.[417]

Additionally, the Commission proposed to require that the execution quality statistics for beyond-the-midpoint limit orders include the additional information required of both marketable and non-marketable order types.[418] The Commission also proposed to modify the time-to-execution statistics to state that, with respect to beyond-the-midpoint limit orders, these time-based statistics would have been measured from the time such orders become executable rather than from the time of order receipt.[419]

(2) Final Rule and Discussion

A national securities exchange and a broker-dealer supported including beyond-the-midpoint orders among the new order type categories.[420] The broker-dealer stated that adding beyond-the-midpoint limit orders, along with NMLOs that become executable, should capture many more orders.[421] On the other hand, an industry group questioned whether the proposed inclusion of beyond-the-midpoint limit orders would be worthwhile given their current sparse usage (2.9% of NMLOs), which the commenter predicts would decrease if the minimum pricing increments proposed in the pending Minimum Pricing Increments Proposing Release[422] are adopted.[423] In addition, this commenter suggested clarifying that an order that is a beyond-the-midpoint limit order would not also be a NMLO.[424]

After consideration of the comments, the Commission is adopting an order type for limit orders priced aggressively as compared to the midpoint, but with several modifications from the beyond-the-midpoint limit order that was proposed. The specific changes being made from the proposal are: (1) revising the definition of ''beyond-the-midpoint limit order'' to include limit orders priced at the midpoint and renaming this term ''midpoint-or-better limit order''; and (2) making a modification to this definition to account for the interim opening period, as suggested by a commenter.[425] In addition, the Commission is adopting as proposed the requirements that for this order type: (1) the Rule 605 report will include the execution quality statistics specific to both marketable order types and non-marketable order types;[426] and (2) time-based statistics will be measured from the time such orders become executable.[427]

The Commission is expanding the scope, as compared to the proposal, of the ''midpoint-or-better'' order types to include limit orders priced at the midpoint in response to a commenter's concern that a category for orders that are priced more aggressively than the midpoint may not be worthwhile because these types of NMLOs are sparsely used.[428] The Commission conducted additional analysis of NMLOs priced in between the national best bid and national best offer and continues to believe that market participants would benefit from receiving execution quality information specific to NMLOs priced better than the midpoint, along with NMLOs priced at the midpoint, because they may have different execution quality statistics than other types of NMLOs.[429] The Commission understands that some NMLOs priced inside the quote are submitted by traders with the intention of executing immediately against hidden or odd-lot liquidity that may be available. Scoping in limit orders priced at the midpoint will increase the size of this order type category, while including additional orders that have certain execution quality statistics that are similar to limit orders priced more aggressively than the midpoint.[430] Midpoint-or-better limit orders may be treated more like marketable limit orders in certain contexts, and the Commission continues to believe that market participants will benefit from receiving price improvement statistics and effective spread statistics for these order types.

In response to a commenter's request for clarification that an order that falls within this order type would not also be a NMLO,[431] the Commission confirms that midpoint-or-better limit orders will not fall within the order type category for NMLOs that become executable. Although midpoint-or-better limit orders are technically a subset of NMLOs, the definition of ''categorized by order type'' expressly excludes midpoint-or-better limit orders from the order type category for executable NMLOs.[432] Accordingly, execution quality data for midpoint-or-better limit orders will be included within the statistics for only the order type categories for midpoint-or-better limit orders (excluding IOCs) or midpoint-or-better limit orders with an immediate-or-cancel instruction, and described in section III.B.2.c)(2) below.

(c) Marketable and Non-Marketable IOCs

(1) Proposed Approach

Prior to the amendments, Rule 605 reports grouped marketable IOCs together with other marketable orders.

[417] *See id.*; proposed Rule 600(b)(16).

[418] *See* Proposing Release, 88 FR 3786 at 3811 (Jan. 20, 2023); proposed Rule 605(a)(1)(i) through (iii).

[419] *See* Proposing Release, 88 FR 3786 at 3811 (Jan. 20, 2023); proposed Rule 600(b)(9) (definition of average effective order quoted spread), (10) (definition of average effective spread), (11) (definition of average percentage effective spread).

[420] *See* Nasdaq Letter at 44; Rule 605 Citadel Letter at 11.

[421] *See* Rule 605 Citadel Letter at 11.

[422] *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 (Dec. 29, 2023).

[423] *See* FIF Letter at 13.

[424] *See id.* at 12.

[425] *See* final 17 CFR 242.600(b)(57). *See also* supra section III.A.1.b) (discussing modifications to account for interim opening period).

[426] *See* final 17 CFR 242.605(a)(1)(i) through (iii). *See also* final 17 CFR 242.600(b)(19).

[427] *See* final 17 CFR 242.600(b)(8), (9), and (12). As discussed further below, the Commission is adopting a separate order type category for midpoint-or-better limit orders that are also IOCs. *See infra* section III.B.2.c). As such, the Commission is adopting separate order type categories for midpoint-or-better limit orders (excluding IOCs) and midpoint-or-better limit orders that are immediate-or-cancel. For purposes of this release, these two order types may be referred to collectively as ''midpoint-or-better order types.''

[428] *See supra* note 423 and accompanying text. The Commission is still considering the proposed changes to minimum pricing increments discussed in the Minimum Pricing Increments Proposing Release.

[429] For example, Commission analysis demonstrates that midpoint-or-better limit orders executed by wholesalers tend to have somewhat higher fill rates and on-exchange midpoint-or-better limit orders tend to have a higher percentage of orders that execute in less than 1 millisecond. *See infra* note 1213; Table 4. *See* also Proposing Release, 88 FR 3786 at 3810–11 (Jan. 20, 2023).

[430] *See infra* Section IX.C.3.c)(3).

[431] *See supra* note 424 and accompanying text.

[432] The Commission is modifying this exclusion in the definition of ''categorized by order type'' from the proposal to refer to the midpoint-or-better order types instead of beyond-the-midpoint limit orders to conform with the modification to the defined term as discussed above. *See* final 17 CFR 242.600(b)(19).

The Commission proposed to assign marketable IOCs their own separate order type category by adding a category for ''marketable immediate-or-cancel orders'' and indicating that the category for ''marketable limit orders'' excludes IOC orders.[433] The Commission also proposed to require the same execution quality information for marketable IOCs as is required for other marketable order types.[434]

(2) Final Rule and Discussion

A national securities exchange supported establishing a new order type category for marketable IOC orders.[435] An industry group stated that, for each order type, the execution profile differs based on whether the orders are IOC or time-in-force orders and therefore recommended requiring broker-dealers and market centers to break out reporting of all order types (not just marketable order types, as proposed by the Commission) to distinguish between IOC and time-in-force orders.[436]

A broker-dealer stated that it supported assigning IOCs to a separate order category so that they would no longer be commingled with retail orders.[437] According to this commenter, many wholesale broker-dealers execute IOC orders for non-retail investors and currently ''these IOC orders may be aggregated with retail orders for reporting purposes, even though the execution profile is very different and could negatively skew a wholesale broker-dealer's execution quality metrics.'' [438] This commenter also stated that although the Commission proposed to assign marketable IOCs as a separate order type category, similar treatment was not proposed for non-marketable IOCs.[439] Thus, this commenter suggested that the Commission ''include a flag for IOC orders that equally applies across both marketable and non-marketable orders'' because of the commenter's view that including non-marketable IOCs within the same order type category as regular NMLOs would significantly skew reported data.[440]

Following consideration of the comments, the Commission is adopting a separate order type category for marketable IOCs as propose[441] Moreover, to address commenters' suggestions that there also be separate order type categories for non-marketable IOCs,[442] the Commission is adopting, in addition to the categories that were proposed, order type categories for NMLOs that are immediate-or-cancel (''NMLO IOCs'') and midpoint-or-better limit orders that are immediate-or-cancel (''midpoint-or-better IOCs''). As is the case with other non-marketable order types, NMLO IOCs will be included in Rule 605 reports if they become executable.[443] Additional Commission analysis demonstrates that IOCs represent a significant component of order flow for both marketable orders and non-marketable orders.[444] Moreover, the Commission agrees with the commenter that commingling NMLO IOCs with NMLOs that are not immediate-or-cancel or midpoint-or-better IOCs with midpoint-or-better limit orders that are not immediate-or-cancel could distort execution quality statistics[445] because the Commission's analysis demonstrates that IOCs tend to have shorter execution times and, with respect to orders received by wholesalers, lower fill rates.[446]

However, the Commission is not fully adopting commenters' suggestion that the Commission differentiate between IOCs and orders that are not immediate-or-cancel for every order type category used in Rule 605.[447] While the adopted amendments will add order type categories for marketable IOCs, executable NMLO IOCs, and midpoint-or-better IOCs, the adopted amendments will not include separate order type categories for IOCs that have characteristics of the other order types (*e.g.,* market order with an immediate or cancel instruction, executable stop marketable limit order with an immediate or cancel instruction). An order submitter placing a market order likely has an expectation of receiving an immediate execution because there is no limit price. IOC limit orders are also submitted with an expectation of executing immediately. Moreover, an order submitter placing a market order with an immediate or cancel instruction or a limit order with an immediate or cancel instruction can reasonably expect that, if the order receives an execution, it will be at the prevailing market price at the time of order receipt. Therefore, the Commission does not believe that the execution profile for market orders with an immediate or cancel instruction will vary significantly enough from other marketable IOCs to warrant an order type category for market orders with an immediate or cancel instruction that separates these orders from other marketable IOCs.[448] In addition, as discussed above, the execution profiles for an order type category or categories for limit orders with a stop condition and an IOC instruction are not likely to have significantly different execution profiles than other stop orders that fall within the same order type categories based upon marketability, and thus the Commission is not requiring order type categories that would further sub-divide the categories for orders submitted with stop prices.[449]

[433] *See* Proposing Release, 88 FR 3786 at 3811 (Jan. 20, 2023); proposed Rule 600(b)(20).

[434] *See* Proposing Release, 88 FR 3786 at 3811 (Jan. 20, 2023); proposed Rule 605(a)(1)(i) and (ii).

[435] *See* Nasdaq Letter at 44.

[436] *See* FIF Letter at 13. This commenter stated that an additional column in the Rule 605(a)(1) report could be used to indicate whether a particular row pertains to IOC or time-in-force orders. *See id. See also* FIF Letter III at 4.

[437] *See* Rule 605 Citadel Letter at 7.

[438] *Id.*

[439] *See id.* at 10.

[440] *See id.*

[441] *See* final 17 CFR 242.600(b)(19).

[442] *See supra* notes 436, 440, and accompanying text.

[443] To implement this change from the proposed amendments, the Commission is modifying the proposed amendments to the definition of ''categorized by order type'' to add midpoint-or-better limit orders that are immediate-or-cancel and executable non-marketable limit orders that are immediate-or-cancel, as well as to exclude IOCs from the order types for midpoint-or-better limit orders and executable NMLOs. *See* final 17 CFR 242.600(b)(19). Consistent with this change, the Commission is also modifying Rule 605 to refer to midpoint-or-better limit orders and midpoint-or-better IOCs in Rule 605(a)(1)(i) (setting forth execution quality statistics required of all order types), (ii) (setting forth execution quality statistics required of marketable order types), and (iii) (setting forth execution quality statistics required of non-marketable order types); and to refer to executable NMLOs and executable NMLO IOCs in Rule 605(a)(1)(i) and (iii).

[444] *See infra* Table 5. With respect to orders that would fall within the adopted NMLO IOC category, this analysis demonstrates that for orders received by exchanges and ATSs, IOCs represent 4.7% of orders priced below the midpoint and 13.3% of orders priced at the quote, and for orders received by wholesalers, IOCs represent 65.3% of orders priced below the midpoint and 67.0% of orders priced at the quote. And with respect to orders that would fall within the adopted midpoint-or-better IOC category, this analysis demonstrates that for orders received by exchanges and ATSs, IOCs represent 35.8% of orders priced above the midpoint and 37.9% of orders priced at the midpoint, and for orders received by wholesalers, IOCs represent 90.8% of orders priced above the midpoint and 84.2% of orders priced at the midpoint. *See id.*

[445] *See supra* notes 437–440 and accompanying text.

[446] *See infra* Table 5.

[447] *See supra* notes 436, 440, and accompanying text.

[448] *See infra* Table 5.

[449] *See supra* section III.A.2.b). It is unlikely that many market participants will submit a market order with both a stop condition and an IOC instruction. However, even if such orders are submitted, they will either: (1) trigger immediately and execute at market prices, or (2) not trigger and cancel immediately because of the IOC instruction. In the case of (1), such orders are not likely to have different execution profiles than other market orders submitted with a stop price. In the case of (2), such orders will be cancelled before they become executable and will therefore not be in reported as part of Rule 605 reports because orders submitted with stop prices must be triggered to become executable and be included in a Rule 605 report.

3. Timestamp Conventions and Time-to-Execution Statistics

(a) Proposed Approach

Prior to the amendments, Rule 605 required the reporting of information on the number of shares of covered orders executed within certain timeframes, as measured in seconds after the time of order receipt.[450] Rule 605 also required the reporting of information on the average time to execution for marketable order types.[451] In addition, the definitions ''time of order execution'' and ''time of order receipt'' in preexisting Rule 600 specified that time must be measured ''to the second.'' [452]

The Commission proposed to update the timestamp conventions in the definitions of ''time of order receipt'' and ''time of order execution'' so that these definitions require that such times be measured in increments of a millisecond or finer.[453] The Commission also proposed to specify that the average time-to-execution statistics that Rule 605 required for marketable order types should be expressed in increments of a millisecond or finer.[454] Further, the Commission proposed to require that the share-weighted average time to execution be provided for non-marketable order types, as calculated from the time such orders become executable, and the proposed definition of ''executable'' provided that the time an order becomes executable shall be measured in increments of a millisecond or finer.[455] Finally, the Commission proposed to eliminate the existing time-to-execution buckets and require the reporting of share-weighted median and 99th percentile time to execution for all order types.[456]

(b) Final Rule and Discussion

As discussed below, after consideration of the comments, the Commission is adopting the use of timestamp conventions of a millisecond or finer for time-based execution quality statistics as proposed. The Commission is also requiring average time-to-execution statistics for all order types and specifying that for NMLOs these statistics will be measured from when the order becomes executable as proposed. However, the Commission is not adopting the proposed median and 99th percentile execution quality statistics for all order types. Instead, the Commission is retaining the time-to-execution buckets from Rule 605 prior to these amendments, which apply to all order types, but is modifying the associated time ranges to account for the overall increase in trading speeds since Rule 605 was adopted and as supported by certain commenters.

Several individual investors supported the proposal to require reporting of average time to execution, median time to execution, and 99th percentile time to execution in increments of a millisecond or finer.[457] Another individual investor stated that measuring in milliseconds would be a ''huge step forward'' in understanding order execution.[458] A national securities exchange supported eliminating time-to-execution categories in favor of average time to execution, median time to execution, and 99th percentile time to execution, each as measured in increments of a millisecond or finer and calculated on a share-weighted basis.[459] This commenter stated that requiring average time to execution for all order types, as well as statistics regarding the distribution of execution times within each order type, ''would offer more consequential information.'' [460] According to this commenter, ''[t]hese statistics could be used to judge and compare the average time to execution for a particular order type and still provide information about the extent to which outlier values may skew the average.'' [461]

One industry group stated that the use of milliseconds is the best approach at this time.[462] This commenter suggested that the Commission should engage in discussions with market centers to consider whether a requirement for market centers to report with increased granularity for CAT, Rule 605, and other required reporting would be appropriate.[463] An investor advocacy group stated that requiring timestamp information in millisecond increments would allow for meaningful points of comparison between market centers and/or broker-dealers for data that uses timestamp information and time-to-execution statistics.[464] Another investor advocacy group recommended that the Commission modify the required time-to-execution buckets for all order types to time buckets that can be adjusted over time, starting with the following buckets: less than 500 microseconds; 500 microseconds to 1 millisecond; 1 to 10 milliseconds; 10 to 100 milliseconds; 100 milliseconds to 1 second; 1 to 10 seconds; and greater than 10 seconds.[465] This commenter stated that ''[b]y creating buckets for timestamp, rather than average time to execution, the reports would provide much greater granularity while still allowing a user of the data to recreate average time to execution.'' [466] A broker-dealer supported the new statistics reporting times in increments of a millisecond or finer and stated that this will better reflect the speed at which orders are executed today.[467]

[450] *See* prior 17 CFR 242.605(a)(1)(i)(F) through (J) (requiring for all orders the reporting of the cumulative number of shares of covered orders executed within 5 specified time intervals after the time of order receipt). The preexisting time-to-execution bucket intervals were: (1) 0 to 9 seconds; (2) 10 to 29 seconds; (3) 30 to 59 seconds; (4) 60 to 299 seconds; and (5) 5 to 30 minutes.

[451] *See* prior 17 CFR 242.605(a)(1)(ii)(D), (F), and (I) (requiring for market and marketable limit orders the reporting of average time to execution for shares executed with price improvement, shares executed at the quote, and shares executed outside the quote, respectively). *See infra* section III.B.4.g) for additional information about Rule 605 statistics based on whether orders executed with price improvement, at the quote, or outside the quote.

[452] *See* prior 17 CFR 242.600(b)(91) and (92).

[453] *See* Proposing Release, 88 FR 3786 at 3812 (Jan. 20, 2023); proposed Rule 600(b)(108) and (109).

[454] *See* Proposing Release, 88 FR 3786 at 3812 (Jan. 20, 2023); proposed Rule 605(a)(1)(ii)(C), (G), and (L). Prior to the amendments, Rule 605 did not specify a level of granularity for the existing time-to-execution statistics. However, the Rule 605 NMS Plan requires these fields to be expressed in number of seconds and carried out to one decimal place. *See* Rule 605 NMS Plan section VI (a)(21), (23), and (26).

[455] *See* Proposing Release, 88 FR 3786 at 3812–13 (Jan. 20, 2023); proposed Rule 600(b)(42); proposed Rule 605(a)(1)(iii)(C).

[456] *See* Proposing Release, 88 FR 3786 at 3812–13 (Jan. 20, 2023); proposed Rule 605(a)(1)(ii)(D), (E), (H), (I), (M), and (N); proposed Rule 605(a)(1)(iii)(D) and (E). Specifically, the Commission stated that while the distribution of execution speeds in addition to the average would still be useful, the then-existing time-to-execution buckets are of limited utility because the smallest time-to-execution bucket encompasses all orders executed between zero and nine seconds. *See* Proposing Release, 88 FR 3786 at 3813 (Jan. 20, 2023). The Commission further stated that, rather than adding additional buckets to provide distribution information for execution speeds of less than one second, the Commission was proposing to require both share-weighted median and 99th percentile time-to-execution statistics to allow users of the data to assess how quickly a market center or broker-dealer is able to execute incoming orders and understand the extent to which the time to execution for a particular category is affected by outlier values. *See id.*

[457] *See, e.g.,* Pritchard Letter, Macarthur Letter, and Cesar Letter.

[458] *See* Bledsoe Letter. In addition, several commenters stated that ''broker-dealers are able and should be required to measure order executions in seconds or milliseconds, rather than 2 days.'' Letter Type C at *https://www.sec.gov/comments/s7-29-22/s72922.htm.*

[459] *See* Nasdaq Letter at 44.

[460] *See id.* at 45.

[461] *Id.*

[462] *See* FIF Letter at 17.

[463] *See id.*

[464] *See* Better Markets Letter at 8.

[465] *See* Healthy Markets Letter at 17 (recommending that the Commission adopt these time buckets pursuant to an attachment to the Rule, rather than the Rule itself, to facilitate the easy updating of these buckets).

[466] *Id.*

[467] *See* Robinhood Letter at 46.

The Commission is adopting the updates to the timestamp conventions to measure time-based statistics in increments of a millisecond or finer as proposed for the reasons discussed in the Proposing Release.[468] Requiring that Rule 605 reports include timestamp information in millisecond increments will allow for meaningful points of comparison among market centers or broker-dealers.[469]

A broker-dealer stated that although it supports transitioning time-to-execution metrics to smaller increments of time, it is concerned that more granular timestamps may lead to greater variation across firms because firms may have different practices around when to mark the same event, quotation information may vary materially due to geographic latency, and SIP data are likely to vary from proprietary feeds.[470] This commenter stated that the Commission should address these potential issues with timestamps to ensure that execution quality statistics for brokers are not misleading, biased, or inconsistent.[471] However, evidence suggests that geographic latencies, which may account for the majority of latency differences experienced by the SIP, are currently below a millisecond.[472] Therefore, any distortions related to latencies are likely to be smaller than the timestamp granularity. Further, it is likely that distortions may be reduced by using finer timestamp conventions that more closely align to existing market practice, as the NBBO that is matched to a particular order is likely to be closer to the NBBO at the time of order receipt.[473] Reporting firms generally should record the time of order receipt at the time that the firm first receives the order and the time of order execution at the time of execution as included on the trade confirmation.

One individual investor, who expressed concern related to the proposal, stated that focusing on the speed of execution only benefits high-frequency traders who can take advantage of small price discrepancies to make quick profits.[474] This commenter stated that he is more concerned with getting a fair price for his trades than the speed of execution.[475] The Commission is retaining time-to-execution statistics in Rule 605 reports for the reasons discussed herein. Different investors benefit from faster execution times for different reasons. With respect to individual investors in particular, delays in execution can lead to worse prices for market orders in an increasing (for buy orders) or decreasing (for sell orders) market and lower probabilities of execution for IOCs.[476] However, amended Rule 605 does not focus on speed to the exclusion of other important aspects of execution quality, including fill rates and price improvement.

The Commission is adopting, as proposed, the requirement that average time-to-execution statistics be calculated for all order types, including non-marketable order types.[477] The Commission is also adopting, as proposed, the requirement that average time to execution for non-marketable order types be measured from the point in time that orders become executable because this will provide a control for prevailing market conditions and benchmark orders from a point when such orders can reasonably be expected to execute.

An industry group raised concerns with reporting time to execution when the size of the customer's order exceeds the size of the opposite-side bid or offer and suggested that time-to-execution statistics for marketable orders should only consider the time to execution for shares executed by a reporting firm during the time period prior to the order first becoming unmarketable.[478] This commenter stated that firms that receive marketable orders that are larger relative to the opposite-side displayed NBBO quantity would show a longer time to execution as compared with firms that receive marketable orders that are smaller relative to the opposite-side displayed NBBO quantity, and in this way reported performance would be impacted by factors that do not reflect a true comparison of the execution performance across firms.[479] In addition, a broker-dealer stated that execution time statistics should be required only for market orders because marketable limit orders (including NMLOs that become marketable) may be partially executed or may exceed the consolidated quote size and it would be difficult to interpret this data without more context and information.[480] Another commenter stated that the execution speed metric for marketable limit orders should be limited to size available at the best protected quote at the far touch because this will ensure that orders larger than the quoted size that take out the best price and are posted for the balance do not skew the statistics.[481]

The Commission is not adopting these commenters' suggestions to limit the application of time-to-execution statistics to take into account concerns about marketable limit orders that exceed the available quantity at the opposite side bid or offer. The Commission disagrees with restricting time-to-execution statistics so that they apply to market orders only because time-to-execution statistics will provide meaningful information for all marketable and non-marketable order types and the time it takes to execute an initially marketable limit order that becomes non-marketable is still relevant.[482] The Commission also disagrees with the suggestion that it is necessary to limit time-to-execution statistics to the time it takes to execute the size available at the opposite side quote or the time it takes to first exhaust available liquidity to avoid skewed statistics. If a covered order receives a partial execution, the share-weighted time-to-execution statistics will consider the execution time of each subset of shares that received an execution and will not consider any subset of shares that does not receive an execution, and this will help mitigate against partial executions distorting

[468] *See* Proposing Release, 88 FR 3786 at 3812 (Jan. 20, 2023).

[469] *See id.* Reporting entities that choose to utilize a timestamp convention finer than a millisecond generally should utilize that same convention throughout their detailed report required by Rule 605(a)(1) for a particular month.

[470] *See* Robinhood Letter at 47–48.

[471] *See id.* at 48.

[472] *See infra* note 1461 and accompanying text.

[473] *See id.*

[474] See Gillmore Letter.

[475] *See id.*

[476] *See infra* notes 1476–1477 and accompanying text.

[477] *See* final 17 CFR 242.605(a)(1)(ii)(G), (I), and (L); final 17 CFR 242.605(a)(1)(iii)(D). See also Proposing Release, 88 FR 3786 at 3813 (Jan. 20, 2023).

[478] *See* FIF Letter II at 3–4. In an earlier comment letter, this commenter had suggested that the time-to-execution period should only consider the portion of an order that is marketable at the time of order receipt or, alternatively, only count towards the time of execution the period during which the order is marketable. *See* FIF Letter at 18. *See also* FIF Letter II at 3 (amending its suggestion after further discussions).

[479] *See* FIF Letter at 17–18; FIF Letter II at 3. This commenter also requested confirmation that time to execution should not be reported for unfilled shares and that unfilled shares would be reflected through the reporting of the number of shares of covered orders and the number of shares cancelled prior to execution. *See* FIF Letter at 18. The Commission agrees that, as is currently the case, the time to execution for unfilled shares will not be required to be reported as part of the time-to-execution statistics because their inclusion could distort the statistics. *See, e.g.,* final 17 CFR 242.605(a)(1)(i)(G) (requiring disclosure of ''the cumulative number of *shares* of covered orders'' executed in less than 100 microseconds) (emphasis added).

[480] *See* Rule 605 Citadel Letter at 10.

[481] *See* Schwab Letter II at 32.

[482] *See supra* note 480 and accompanying text.

time-to-execution statistics.[483] Similarly, if some shares of a covered order execute more quickly than others due to the availability of liquidity, the share-weighted time-to-execution statistics will take into account the time to execution for each subset of shares. Other available information will allow users of Rule 605 reports to control for these types of factors and facilitate their ability to interpret time-to-execution statistics for marketable limit orders. In particular, Rule 605 statistics will be categorized by order type and size and this categorization will provide useful context to understand time-to-execution statistics. For example, larger-sized orders may be more likely to exceed the consolidated quote size and the time-to-execution statistics for covered orders that fall within different size ranges will appear in separate rows.

Individual investors and a national securities exchange supported the proposed addition of median and 99th percentile time-to-execution statistics for all order types.[484] However, an industry group recommended an alternative to the reporting of the median and 99th percentile statistics because of its view that market participants and other firms analyzing Rule 605 data would not be able to aggregate these statistics across symbols and order types.[485] The commenter stated that ''it is important that users of the report have the ability to aggregate this data . . . across different sub-categories of orders.'' [486] Specifically, this commenter recommended that firms report share-weighted average time to execution without adjusting for outliers and separately report share-weighted average time to execution with an adjustment for outliers.[487] In addition, an investor advocacy group suggested that the Commission modify the required time-to-execution buckets for all order types to time buckets that can be adjusted over time rather than requiring average time-to-execution statistics.[488]

The Commission agrees with the commenter that it would not be possible to aggregate median or 99th percentile time-to-execution statistics across symbols or order types.[489] Although median or 99th percentile time-to-execution statistics may have provided useful information in each individual row (*i.e.,* representing a particular symbol, order type, and order size), users of the reports would have been unable to aggregate these statistics across multiple rows without the full underlying dataset because the median and 99th percentile values cannot be aggregated across different stocks or order types. The inability to aggregate these statistics would have made them less useful because the final rule amendments will result in more rows of information, and the median and 99th percentile time-to-execution statistics would only have provided information to compare more discrete subsets of Rule 605 data. Therefore, the Commission is not adopting its proposal to require the reporting of median and 99th percentile time-to-execution statistics for all order types.

The Commission is not adopting the commenter's suggestion that, instead of requiring median and 99th percentile time-to-execution statistics, the Commission should require the separate reporting of average time to execution with outliers and without outliers.[490] The Commission does not agree that these alternative metrics would solve the identified problem because the method of identifying outliers, such as the longest 1% of orders, would also prevent aggregation across multiple rows. As is the case with median and 99th percentile statistics, any cut-off selected as the means to identify outliers would not be constant across different stocks or order types and thus interfere with aggregation.

As another means of providing such distribution information, and consistent with the alternative that the Commission considered in the Proposing Release [491] and a commenter's suggestion,[492] the Commission is retaining the time-to-execution buckets in place prior to the amendments and modifying these buckets to incorporate additional granularity. The Commission continues to believe that information about the distribution of order execution speeds is useful because orders may execute near instantaneously or over the course of several minutes and thus average time-to-execution statistics in some instances could be skewed by outlier values. The amended time-to-execution buckets that the Commission is adopting will provide information about the distribution of execution times at a more granular level. This information will allow market participants and other users of the data to assess how quickly a market center or broker-dealer is able to execute incoming orders and better understand whether and to what extent the average time to execution within a particular category may be affected by outlier values.

The adopted time-to-execution buckets differ from the time-to-execution buckets that existed in Rule 605 prior to the amendments in two respects. First, the Commission is utilizing new time ranges for the time-to-execution buckets to make the buckets more granular in recognition of increased execution speeds and consistent with comment. As adopted, the time-to-execution bucket ranges are: (1) less than 100 microseconds; (2) 100 microseconds to less than 1 millisecond; (3) 1 millisecond to less than 10 milliseconds; (4) 10 milliseconds to less than 1 second; (5) 1 second to less than 10 seconds; (6) 10 seconds to less than 30 seconds; (7) 30 seconds to less than 5 minutes; and (8) 5 minutes or more.[493] The Commission is selecting these amended time-to-execution bucket ranges based on its analysis of the distribution of shares across various time-to-execution buckets.[494] The Commission's analysis demonstrates that most market and marketable limit orders have execution times clustered in the faster buckets and most at-the-quote NMLOs have execution times in the slower buckets.[495] The time-to-execution buckets that the Commission is adopting are designed to best capture variations in execution times across different order types.

Specifically, the Commission is including a time-to-execution bucket of less than 100 microseconds in order to provide visibility into differences in execution times for IOCs. Most IOCs execute in less than 100 microseconds and the distribution of some IOCs across slower time-to-execution buckets will

[483] Requiring that average time-to-execution statistics be calculated for non-marketable order types from the point in time that they become executable will realize the benefits of including those orders in the statistics while, at the same time, minimizing the distortions that could occur if time-to-execution statistics included the time during which such orders were non-marketable.

[484] *See supra* notes 457, 459–461, and accompanying text.

[485] *See* FIF Letter at 21–22; FIF Letter II at 7–9; FIF Letter III at 3.

[486] FIF Letter III at 3.

[487] *See* FIF Letter at 21–22. This commenter suggested that, for example, the share-weighted average time to execution that is adjusted for outliers could exclude the one percent of orders with the longest time to execution. *See id.*

[488] *See supra* notes 465–466 and accompanying text.

[489] *See supra* note 485 and accompanying text.

[490] *See supra* note 487 and accompanying text.

[491] *See* Proposing Release, 88 FR 3786 at 3892 (Jan. 20, 2023).

[492] *See supra* notes 465–466 and accompanying text.

[493] *See* final 17 CFR 242.605(a)(1)(i)(G) through (N). The Commission is not specifying time ranges for the time-to-execution bucket in a separate attachment as suggested by a commenter (*see supra* note 465) and is instead adopting set time buckets.

[494] *See infra* Figure 20 and Figure 21.

[495] *See infra* note 1466; Figure 21.

allow market participants to use Rule 605 reports to identify IOCs that are outliers with respect to execution time.[496] The Commission is also adopting a time-to-execution bucket of 100 microseconds to less-than-one millisecond that will capture an additional set of sub-millisecond orders. The inclusion of sub-millisecond orders in distinct time-to-execution buckets is consistent with the commenter's suggestion to utilize more granular time buckets for orders executed in less than 500 microseconds and for orders executed in between 500 microseconds and 1 millisecond.[497] The two adopted time-to-execution buckets for orders executed from 1 millisecond to less than 1 second are similar to the commenter's recommendation for sub-second time buckets,[498] but utilize two time-to-execution buckets instead of the suggested three based on the Commission's analysis of order distribution.[499] The time-to-execution buckets for orders executed from 1 second to less than 10 seconds and from 10 seconds to less than 30 seconds are comparable to the two shortest time-to-execution buckets in the preexisting rule.[500] The longest time-to-execution buckets being adopted are comparable to the longest time-to-execution buckets in the preexisting rule, but combine the second- and third-longest buckets based on the Commission's analysis of order distribution.[501]

Under the amended rule, the Commission is adopting time-to-execution buckets at the sub-millisecond level while also adopting a timestamp convention that will not require the use of reporting increments finer than a millisecond. These two aspects of Rule 605 are not inconsistent because the time-to-execution buckets will not require reporting entities to record time in microseconds. Instead, reporting entities that record time at the millisecond-level only generally should bucket orders based on the difference between the recorded time of order receipt (or executability in the case of NMLOs) and the recorded time of execution.[502] Accordingly, a reporting entity that records time in milliseconds generally should report in milliseconds and will not be able to identify orders as being completed in less than 100 microseconds; therefore, this time-to-execution bucket will remain empty.[503]

Second, when calculating where an NMLO falls within a time-to-execution bucket, time to execution will be calculated from the time the order becomes executable.[504] Prior to the amendments, Rule 605 reporting requirements included only those NMLOs that fell within limited order type categories (*i.e.,* inside-the-quote limit orders, at-the-quote limit orders, and near-the-quote limit orders) and the preexisting time-to-execution buckets contemplated that, for all orders, the relevant time period to be measured was from the time of order receipt to the time of order execution.[505] Calculating where NMLOs fall within the time-to-execution buckets utilizing the time the order becomes executable rather than the time of order receipt is consistent with how the Commission proposed, and is adopting, to measure other time-based execution quality statistics for NMLOs.[506]

4. Execution Quality Statistics

Preexisting Rule 605(a)(1) required market centers to include in their monthly reports columns of detailed execution quality information. For all order types, the required statistics included information on the number of orders; cumulative number of shares; cumulative number of shares cancelled prior to execution; cumulative number of shares executed at the receiving market center and at any other venue; and average realized spread.[507] In addition, for market orders and marketable limit orders, the required statistics included information on the average effective spread; cumulative number of shares executed with price improvement, at the quote, and outside the quote; for shares executed with price improvement, the share-weighted average amount per share that prices were improved; and for shares executed outside the quote, the share-weighted average amount per share that prices were outside the quote.[508]

As described further herein, the Commission proposed to modify the execution quality statistics required for all order types and marketable order types, and to add execution quality statistics specific to non-marketable order types. As proposed, the required statistics for all order types would have included information on the number of orders; cumulative number of shares; cumulative number of shares cancelled prior to execution; cumulative number of shares executed at the receiving market center, broker, or dealer, and at any other venue; cumulative number of shares of the full displayed size of the protected bid or offer at the time of execution; average realized spread and average percentage realized spread at two time intervals; average effective spread; average percentage effective spread; and average effective over quoted spread.[509] In addition, the required statistics for marketable order types and beyond-the-midpoint limit orders would have included the cumulative number of shares for shares executed with price improvement, at the quote, and outside the quote; share-weighted average amount per share that prices were improved; share-weighted average amount per share that prices were outside the quote; and price improvement statistics relative to the best available displayed price.[510] Finally, for non-marketable order types the required statistics would have included the number of orders that received a complete or partial fill, and cumulative number of shares executed regular way at prices that could have filled the order while the order was in force.[511]

Several individual investors generally supported the proposal to add new execution quality statistics.[512] One of these individual investors stated that the proposed enhancements to the required statistical measures of execution quality will provide valuable insights for investors.[513] Another individual investor stated that the proposed modification to reporting requirements for NMLOs would capture more relevant execution quality

[496] *See infra* note 1465; Figure 20.

[497] *See supra* notes 465–466 and accompanying text.

[498] *See supra* note 465 and accompanying text.

[499] *See supra* notes 494–495 and accompanying text.

[500] *See* prior 17 CFR 242.605(a)(1)(i)(F) (for covered orders executed from 0 to 9 seconds after the time of order receipt) and (G) (for covered orders executed from 10 to 29 seconds after the time of order receipt).

[501] *See* prior 17 CFR 242.605(a)(1)(i)(I) (for covered orders executed from 60 seconds to 299 seconds after the time of order receipt) and (J) (for covered orders executed from 5 minutes to 30 minutes after the time of order receipt).

[502] *See, e.g.,* final 17 CFR 242.605(a)(1)(i)(G) (requiring reporting of ''[t]he cumulative number of shares of covered orders executed less than 100 microseconds after the time of order receipt; or, for non-marketable limit orders, after the time the order becomes executable'').

[503] *See* note 496 and accompanying text (stating that most IOCs execute in less than 100 microseconds).

[504] *See, e.g.,* final 17 CFR 242.605(a)(1)(i)(G).

[505] *See, e.g.,* prior 17 CFR 242.605(a)(1)(i)(F).

[506] *See supra* note 455 and accompanying text.

[507] *See* prior 17 CFR 242.605(a)(1)(i).

[508] *See* prior 17 CFR 242.605(a)(1)(ii). For a discussion of the time-to-execution statistics in the current rule, *see supra* section III.B.3.

[509] *See* Proposing Release, 88 FR 3786 at 3903–04 (Jan. 20, 2023).

[510] *See id.* at 3904.

[511] *See id.* at 3904–05. For a discussion of the proposed modifications to time-to-execution statistics as discussed in the Proposing Release, *see supra* section III.B.3.

[512] *See, e.g.,* Prichard Letter; Varghese Letter; Welch Letter.

[513] *See* Varghese Letter.

information for these orders.[514] However, an individual investor that expressed concerns about the proposal stated that the proposed amendments to execution quality statistics ''do not address the fundamental of market fragmentation, where orders are routed to different venues depending on their likelihood of being executed quickly and cheaply.'' [515]

An industry group stated that the Commission does not appear to have considered the impact of variable tick sizes for securities, as contemplated by the proposed harmonization of quoting and trading increments discussed in the Minimum Price Increments Proposing Release, on market participants' ability to compare execution quality over several months.[516] This commenter suggested that there should be some mechanism by which investors are informed of how to interpret Rule 605 reports in situations where the tick size is recalibrated and it impacts reported execution quality.[517]

A group of academics stated that although some of the new disclosure requirements may be helpful for a subset of trades, they suggest limiting changes to the Rule 605 statistics to the new order size categories, including new categories for fractional shares and odd-lots, and E/Q statistics.[518] These commenters stated that these adjustments would reduce implementation costs and speed up adoption.[519] However, although limiting the changes to order size categories and E/Q statistics could potentially reduce costs and speed implementation, the other adopted modifications to the execution quality statistics described herein are designed to enhance the disclosures required by prior Rule 605. Even if the Commission were to limit the amendments to order sizes and E/Q statistics, preexisting market centers would still need to adjust their systems and processes to capture new information and new reporting entities would need to develop their systems and processes to capture the required execution quality statistics.

The Commission received many comments concerning specific execution quality statistics and discusses these comments below. Further, with respect to the proposed execution quality statistics in general, an academic suggested adding median data in addition to average data because, according to this commenter, ''fat tails'' can make average numbers ''highly misleading.'' [520] This commenter also generally suggested that percentages should be included along with dollar amounts.[521]

The Commission is adopting the proposed detailed execution quality statistics with several adjustments. In the subsections below, the Commission discusses the comments received and the execution quality statistics being adopted as they pertain to: (1) realized spread, (2) average effective spread, (3) percentage-based effective and realized spread, (4) effective over quoted spread, (5) size improvement, (6) riskless principal, (7) price improvement, and (8) relative fill rate.[522] In response to the commenter's suggestion to add median data and percentages, as described herein, the Commission is adopting additional statistics that will provide modified time-to-execution buckets, percentage-based statistics that will complement certain dollar-based statistics, and an average midpoint statistic that will make it possible to calculate percentages relevant to other statistics.

(a) Realized Spread

(1) Proposed Approach

Prior to these amendments, Rule 605 required calculation of average realized spread for executions of all covered orders and this metric was calculated by comparing the execution price of an order and the midpoint of the NBBO as it stands 5 minutes after the time of order execution.[523] The Commission proposed to shorten this time horizon and require that average realized spread be calculated 15 seconds and 1 minute after the time of execution in recognition of the increased speed of the contemporary market environment.[524] The Commission proposed to require realized spreads to be calculated at both intervals in order to provide relevant information for symbols with different liquidity characteristics.

(2) Final Rule and Discussion

The Commission is adopting the proposed realized spread time horizons of 15 seconds and 1 minute for the realized spread statistics required for all order types. After considering comments received, the Commission is also adding shorter time horizons of 50 milliseconds and 1 second, and additionally retaining preexisting Rule 605's requirement to calculate realized spread 5 minutes after the time of order execution. In total, there will be five realized spread time horizons: 50 milliseconds, 1 second, 15 seconds, 1 minute, and 5 minutes.

A national securities exchange, an investor advocacy group, and an individual investor supported the proposed changes to realized spread.[525] However, an industry group and two broker-dealers opposed the continued inclusion of realized spread statistics and recommended that the Commission remove these statistics from Rule 605's reporting requirements.[526] The industry group stated that it was concerned that this data element is being misused as a proxy for certain firm profits.[527] One of the broker-dealers stated that ''the Commission's assertion that realized spread can serve as a proxy for liquidity provider profitability has been thoroughly discredited, including by academic research.'' [528] The other broker-dealer stated that realized spread statistics are not a measure of profitability because they ignore inputs that impact profitability, including inventory holding costs, fixed costs, and transaction rebates and fees.[529] This commenter further stated that ''there is

[514] *See* Genco Letter.

[515] *See* Gillmore Letter. The proposed changes to Rule 605's execution quality metrics are not intended to reduce market fragmentation. Instead, the Commission expects that these changes will ameliorate the potentially adverse effects of market fragmentation on efficiency, price transparency, best execution of investor orders, and order interaction.

[516] *See* SIFMA Letter II at 20.

[517] *See id.* at 21. The Commission is still considering the proposal to change tick sizes discussed in the Minimum Pricing Increments Proposing Release.

[518] *See* Professor Schwarz et al. Letter at 5.

[519] *See id.*

[520] *See* Angel Letter at 4.

[521] *See id.*

[522] For a discussion of the time-to-execution statistics that the Commission is adopting and the changes made to those statistics as compared to what was proposed, *see supra* section III.B.3. For a discussion of the cumulative notional value of covered orders statistic that the Commission is adopting, *see supra* notes 376–378 and accompanying text.

[523] *See* Proposing Release, 88 FR 3786 at 3814 (Jan. 20, 2023). For buy orders, realized spread was calculated as double the amount of difference between the execution price and the midpoint of the NBBO 5 minutes after the time of order execution. For sell orders, realized spread was calculated as double the amount of difference between the midpoint of the NBBO 5 minutes after the time of order execution and the execution price. *See id.*

[524] *See id.* at 3815.

[525] *See* Better Markets Letter at 8; Nasdaq Letter at 44; Pritchard Letter. *See also* Schwab Letter III at 3 (supporting the inclusion of realized spread statistics in the summary report to provide ''better transparency regarding the distinct characteristics of order flow among brokers'').

[526] *See* SIFMA Letter II at 31; Rule 605 Citadel Letter at 8; Virtu Letter II at 11.

[527] *See* SIFMA Letter II at 31.

[528] Rule 605 Citadel Letter at 8–9 (stating that realized spread does not consider the actual exit trade, does not account for fixed or variable costs, and cannot compare a large ''parent'' order with smaller ''child'' orders).

[529] *See* Virtu Letter II at 11–12.

a risk that such measurements are improperly used . . . as a proxy for liquidity providers' profitability.'' [530]

The Commission observes that commenters to the original Rule 11Ac1–5 proposal also questioned the usefulness of a realized spread statistic and recommended that it be eliminated.[531] When adopting Rule 11Ac1–5, the Commission stated that average realized spread is an essential measure for evaluating a market center's order execution practices.[532] Average realized spread remains an essential measure for evaluating execution quality because it measures the portion of the spread that liquidity providers earn in excess of adverse selection.[533] Liquidity providers' adverse selection risk represents the risk that market prices will move against them before they can unwind their accumulated positions. A lower average realized spread can indicate that prices have moved in a direction more adverse to the liquidity provider after the order was executed. Thus, a low average realized spread can indicate that a liquidity provider was providing liquidity at a time when prices were moving against it. In addition, average realized spread can provide useful information about the type of order flow a larger broker-dealer receives because smaller (or even negative) realized spreads reflect that liquidity providers are earning less of the spread from their liquidity provisions, which is usually a reflection of order flow with greater adverse selection risk. Therefore, the Commission is retaining the metric, and is adopting the 15 second and 1 minute time horizons as proposed along with additional time horizons as discussed below, to make the metric more useful in relation to current market speeds.

The Commission stated in the Proposing Release that to the extent realized spreads capture adverse selection costs faced by liquidity providers, they provide a measure of the potential profitability of trading for liquidity providers.[534] The Commission does not maintain that realized spread is a measure of a firm's overall profitability.[535] Instead, realized spread statistics allow market participants to identify those market centers willing to supply liquidity during stressed markets or when prices are moving quickly, and to evaluate larger broker-dealers' order execution or routing practices, as well as to understand the type of order flow a particular broker-dealer may be handling. One commenter, in the context of summary reports, stated that realized spread can be used to calculate price impact (when combined with effective spread statistics), which ''would provide better transparency regarding the distinct characteristics of order flow among brokers.'' [536] For both market centers and larger broker-dealers, realized spread can allow market participants to control for the extent to which orders submitted by persons with better information than is generally available in the market are routed to different market centers or received by different broker-dealers, as compared to orders submitted by persons without an information advantage. Orders submitted by persons with such an information advantage represent a substantial risk to liquidity providers that take the other side of the position.

Several commenters discussed the proposed time horizons for measuring realized spread. An investor advocacy group stated the 15 second and 1 minute time horizons ''better capture the reality of today's fast-paced market transactions and align well with the available academic literature.'' [537] An industry group stated that the Commission has not provided a rational basis for its method of calibrating the realized spread timeframes and, in particular, has not appropriately analyzed inventory turnover, thereby making the proposed 15 second and 1 minute timeframes arbitrary with respect to inventory turnover.[538] A broker-dealer stated that ''[r]ealized spread assumes that liquidity providers exit each position in a costless manner at the end of a fixed period and is highly dependent on the time horizon used to make the calculation'' and questioned the Commission's choice of 15 seconds and 1 minute.[539] This commenter stated that ''[w]hile mark-out metrics like realized spread might have limited use in comparing samples of otherwise substantially similar order flow, these metrics become largely useless when attempting to compare different types of order flow or market centers.'' [540] Another broker-dealer stated that it is unclear what the Commission's basis is for ''bluntly'' measuring realized spreads at 15 seconds and 1 minute.[541] Another investor advocacy group recommended that to best identify adverse selection, realized spread should be calculated on even shorter time horizons, including 50 milliseconds and 100 milliseconds.[542]

As discussed in the Proposing Release, requiring realized spread information at different time horizons will provide investors with relevant information for more liquid stocks and more thinly traded stocks.[543] The Commission selected the 15 second and 1 minute time horizons for calculating realized spread based on its own analysis, which was supported by several commenters and aligned with existing academic literature.[544] However, several commenters questioned the Commission's basis for measuring realized spreads at 15 seconds and 1 minute.[545] In the Proposing Release, the Commission acknowledged that both shorter (50 millisecond, 100 millisecond) and longer (3 minute, 5 minute) time horizons would provide useful information for certain groups of stocks, but stated that each additional time horizon adds computational burden and increases the size and complexity of

[530] *Id.* at 12.

[531] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75424 (Dec. 1, 2000).

[532] *See id.*

[533] *See infra* note 1230 and accompanying text.

[534] *See* Proposing Release, 88 FR 3786 at 3814 (Jan. 20, 2023).

[535] *See infra* note 1232 and accompanying text.

[536] Schwab Letter III at 3. Similarly, an industry group advocated including realized spread statistics in the summary report in order to provide a means of assessing the impact of order flow that market participants may classify as more or less informed as well the size of an order relative to the average daily value of the stock. *See* FIF Letter at 31–32. Because realized spreads will be measured using the price at the time of order execution, and effective spreads will be measured using the price at the time of order receipt (or order executability, in the case of NMLOs and midpoint-or-better limit orders), the decomposition of realized spreads into effective spreads and price impact will not be exact. *See infra* note 1484 for further discussion.

[537] Better Markets Letter at 8.

[538] *See* SIFMA Letter II at 31–32. This commenter further stated that it does not believe a one-size-fits-all metric can work because market participants have different views regarding the appropriate time periods for measuring realized spread and the appropriate period can vary based on the specific symbol or type of order flow involved. *See id.* at 32.

[539] *See* Rule 605 Citadel Letter at 8.

[540] *Id.*

[541] *See* Virtu Letter II at 12.

[542] *See* Healthy Markets Letter at 17.

[543] *See* Proposing Release, 88 FR 3786 at 3815–16 (Jan. 20, 2023).

[544] *See id.* at 3814, n.367 (*citing* Jennifer S. Conrad & Sunil Wahal, *The Term Structure of Liquidity Provision*, 136(1) J. Fin. Econ. 239–259 (2020)) and at 3815. In response to the commenter's statement that the Commission has not appropriately analyzed inventory turnover (*see supra* note 538 and accompanying text), the Commission observes that although an ideal measurement horizon would align with the amount of time that an average liquidity provider holds only inventory positions established from providing liquidity, these data are not easily observable. *See infra* note 1489 and accompanying text. Instead, the Commission's analysis of realized spreads in the Proposing Release was based on the theoretically motivated and empirically observed decline in realized spreads over increasing time horizons, similar to the academic literature. *See infra* notes 1490–1491 and accompanying text.

[545] *See supra* notes 537–541 and accompanying text.

reports.[546] Further, in the Proposing Release, the Commission analyzed the decline in realized spreads of increasing time horizons in order to determine when a significant percentage of the decline in realized spread had been captured.

The Commission replicated its realized spread analysis from the Proposing Release, using data from Q1 2023, and in both analyses the cumulative decline in realized spread captured at different time horizons varies by market capitalization.[547] These results indicate that, consistent with the Commission's statement in the Proposing Release,[548] both shorter and longer time horizons than those proposed will provide useful information for certain subsets of stocks.

After consideration of the comments and the Commission's original and updated analysis, the Commission is adopting two shorter time horizons (50 milliseconds and 1 second) and one longer time horizon (5 minutes, consistent with prior Rule 605) in addition to the two time horizons that were proposed (15 seconds and 1 minute).[549] The time horizons of 50 milliseconds and 1 second are in line with the commenter's suggestion that the Commission include shorter time horizons to better capture adverse selection.[550] Further, as discussed below, the 50 millisecond time horizon is appropriate for large capitalization stocks. The 1 second time horizon offers another point of comparison along the range of time horizons and aligns with a realized spread measure that industry analysts often use.[551] The Commission is also adopting the requirements to calculate realized spread at 15 seconds and 1 minute, which were the time horizons proposed. Finally, the Commission is retaining the requirement in place prior to the amendments to calculate realized spread at 5 minutes. The results of the Commission's replicated realized spread analysis continue to show that a 5 minute time horizon is informative for illiquid stocks.[552] Thus, requiring realized spread at five time horizons will better capture variation [553] among different capitalization stocks with different liquidity profiles than the two proposed thresholds alone.

In response to commenters critical of the Commission's basis for its selection of realized spread time horizons,[554] the Commission performed additional empirical analyses of optimal realized spread time horizons for robustness. The Commission examined the amount of noise in price impact measures to analyze the time horizon that incorporates the lowest amount of noise into measurements of price impact.[555] For the largest stocks, the signal-to-noise ratio begins to decline immediately, even at very fast time horizons.[556] This latter result supports including a very fast time horizon, such as 50 milliseconds, consistent with a comment received.[557] However, the ratio starts to flatten out after the 1 minute horizon for smaller stocks and for medium to large stocks after 15 seconds.[558] Further, for the two smaller stock groups, the results show a small but steady increase in the signal-to-noise ratio as the time horizon increases, implying that realized spread measures are becoming more informative as the noise in the price impact component decreases. This result supports including a longer time horizon, *i.e.*, 5 minutes, which maximizes the signal-to-noise ratio for these stocks.[559] These additional empirical analyses also support a range of realized spread time horizons, consistent with the amended time horizons.

(b) Average Effective Spread

(1) Proposed Approach

Prior to these amendments, Rule 605 required firms to calculate average effective spread for market and marketable limit order types only.[560] Preexisting Rule 600(b)(8) defined ''average effective spread'' as the share-weighted average of effective spreads for order executions calculated, for buy orders, as double the amount of difference between the execution price and the midpoint of the national best bid and national best offer at the time of order receipt and, for sell orders, as double the amount of difference between the midpoint of the national best bid and national best offer at the time of order receipt and the execution price.[561]

The Commission proposed to expand effective spread reporting requirements to require that firms report average effective spread statistics for all covered orders, and to modify the methodology for calculating this metric for executable NMLOs, beyond-the-midpoint limit orders, and executable stop orders.[562] Specifically, the Commission proposed to revise the definition of ''average effective spread'' to provide that, for order executions of NMLOs [563] and orders submitted with stop prices, average effective spread be calculated from the time the order becomes executable.[564]

(2) Final Rule and Discussion

The Commission is adopting a requirement to report effective spread statistics for marketable order types (*i.e.,* market orders, marketable limit orders, and marketable IOCs), marketable stop order types, and midpoint-or-better order types, but is not adopting the proposal to expand the effective spread reporting requirement to other non-marketable order types. For marketable

[546] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

[547] *See id.*; *infra* Table 7. In the Proposing Release, the analysis showed that most of the difference in realized spread was captured for the largest stocks at 15 seconds, and more than half of the difference was captured for smaller cap stocks at one minute. *See* Proposing Release, 88 FR 3786 at 3815 (Table 1) (Jan. 20, 2023). Similarly, the analysis using Q1 2023 data shows approximately 90% of the cumulative decline in realized spread is captured by the 15-second horizon for the largest market capitalization group, compared to only about 50% for the smaller market capitalization groups. At the one-minute horizon, approximately 75% of the realized spread is captured for the smaller market capitalization groups. *See infra* Table 7.

[548] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

[549] *See also infra* notes 833–838 and accompanying text for discussion of the addition of average realized spread to the summary report.

[550] *See supra* note 542 and accompanying text (suggesting that realized spread should be calculated on even shorter time horizons, including 50 milliseconds and 100 milliseconds). The Commission considered 50 and 100 millisecond time horizons as part of its updated analysis, consistent with the commenter's suggestion to add 50 and 100 millisecond time horizons (*see infra* note 1492), but, based on this analysis, determined that one very fast time horizon, such as 50 milliseconds, among a wider range of time horizons will be beneficial, for the reasons described below.

[551] *See, e.g., Bringing the Power of Signal V6 to D-Limit,* IEX (Oct. 31, 2023), *available at https://www.iex.io/article/bringing-the-power-of-signal-v6-to-d-limit;* Mackintosh, Phil, *What Markouts Are and Why They Don't Always Matter*, Nasdaq (July 2020) *available at https://www.nasdaq.com/articles/what-markouts-are-and-why-they-dont-always-matter-2020-07-23*; and Mackintosh, Phil, *All-in Economics to Trade Are What Matters Most, available at https://www.nasdaq.com/articles/all-in-economics-to-trade-are-what-matters-most.*

[552] *See infra* Table 7.

[553] Offering a range of realized spread time horizons is also consistent with industry practice, in which a range of time horizons is used to compare adverse selection with so-called ''mark-out curves.'' *See, e.g., supra* note 551.

[554] *See supra* notes 538 and 541.

[555] *See infra* Figure 22 and Figure 23.

[556] *See infra* Figure 23.

[557] *See supra* note 542.

[558] *See infra* Figure 23.

[559] *See id.*

[560] *See* prior 17 CFR 242.605(a)(1)(ii)(A).

[561] See prior 17 CFR 242.600(b)(8).

[562] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

[563] *See* proposed Rule 600(b)(10). As proposed, beyond-the-midpoint limit orders would have been a type of NMLO. *See* Proposing Release, 88 FR 3786 at 3816, n.385 (Jan. 20, 2023).

[564] *See* proposed Rule 600(b)(10). *See also* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

stop order types and midpoint-or-better order types, average effective spread will be measured from the time that the order becomes executable.

One broker-dealer suggested that the Commission should reconsider whether to require firms to report effective spread statistics for NMLOs because ''effective spread is not widely accepted as a meaningful measure of execution quality for NMLOs.'' [565] This commenter stated that the proposed effective spread metric for NMLOs does not measure a dimension of execution quality that is likely to differ across market centers or be affected much by where an order is routed.[566] This commenter further stated that ''[f]or orders submitted outside the NBBO, [effective spread] essentially amounts to negative one times the quoted spread at the moment the order becomes executable'' and ''shows better execution when the quoted spread is wider.'' [567]

After consideration of the comments, the Commission is adopting a modified version of the proposed amendments. The Commission is adopting amendments that will expand effective spread reporting requirements to include marketable stop order types and midpoint-or-better order types, in addition to market and marketable limit order types as required by the preexisting rule. However, the Commission is not adopting the proposed requirement to require average effective spread statistics for all covered orders, and thus is not requiring reporting for other non-marketable order types. The Commission is also revising the proposed definition of ''average effective spread'' to specify that, for order executions of marketable stop order and midpoint-or-better limit orders, average effective spread is calculated from the time the order becomes executable. In effect, the adopted amendments require average effective spread for all marketable order types (*i.e.,* market orders, marketable limit orders, and marketable IOCs), marketable stop orders, and midpoint-or-better order types.

The Commission acknowledged in the Proposing Release that average effective spread for NMLOs and orders submitted with stop prices would measure something different than the average effective spread for marketable order types.[568] Generally, because these orders are less aggressively priced, average effective spread would not measure the price paid for immediacy of execution as it would for marketable order types.[569] Instead it would provide a measure of the amount a liquidity provider could expect to earn for providing liquidity.[570] As the commenter states, this amount would generally vary based on the width of spread, which is outside the control of the reporting entities that are receiving orders for execution. Therefore, average effective spread for NMLOs and stop NMLO orders may not provide a useful measure to distinguish between market centers or larger broker-dealers and thus the Commission has determined not to adopt this proposed metric. The exception is with respect to midpoint-or-better limit orders, which in some cases behave more like marketable orders.[571] Similar to market and marketable limit orders, some inside-the-quote limit orders are submitted by traders with the intention of executing immediately, in this case against hidden or odd-lot inside-the-quote liquidity. Because midpoint-or-better order types are more aggressively priced, the average effective spread metric will also measure the price these orders could expect to pay for immediacy. Further, requiring average effective spread for midpoint-or-better order types is consistent with requiring the same statistics for this order type as are required for marketable order types (for example, price improvement statistics).

Finally, because marketable stop orders will be either market orders or marketable limit orders at the time they are triggered (*i.e.,* at the time they are executable), measuring effective spread from the point of executability will also measure the price these orders pay for immediacy once triggered. Therefore, as described in section III.A.2.b) above, the Commission is requiring the same statistics for marketable stop orders as for other marketable order types, including average effective spread.

(c) Percentage Spreads (Effective and Realized)

(1) Proposed Approach

Prior to these amendments, Rule 605 statistics included the average realized spread and average effective spread for executions of covered orders, and these statistics provide dollar-based spread data.[572] The Commission proposed to add a requirement that effective spread and realized spread also be reported as percentages.[573] The proposed definitions for ''average percentage effective spread'' and ''average percentage realized spread'' would have: (1) utilized the dollar-based effective and realized spread statistics for the numerator; (2) utilized the midpoint of the NBBO at either the time of order receipt (for marketable order types) or the time an order first becomes executable (for non-marketable order types) as the denominator; and (3) then the result would be averaged on a share-weighted basis for the month.[574]

(2) Final Rule and Discussion

The Commission is adopting the proposed requirement to disclose percentage-based spread statistics for average realized spread and average effective spread. However, the Commission is modifying the proposed definitions of ''average percentage effective spread'' and ''average percentage realized spread'' to use a new defined term (''average midpoint'') in the denominator. Doing so will eliminate any ambiguity about how to calculate these statistics, as described in more detail below. In addition, the Commission is making the percentage effective spread statistic applicable to marketable order types, marketable stop order types, and midpoint-or-better limit order types only, rather than all order types as proposed. Further, the Commission is adding a requirement to include an average midpoint statistic, which serves as the denominator of percentage-based spread statistics, in the detailed reports required pursuant to Rule 605(a)(1).

An investor advocacy group stated that a percentage-based spread measure would provide additional information where there is a significant price change in a security during the month.[575] In addition, an industry group stated its agreement with the approach proposed by the Commission for calculating average percentage effective spread.[576] Specifically, this commenter described share-weighted average percentage spread as the sum of effective spread per share times shares executed divided by the sum of the midpoint times shares executed.[577]

[565] Virtu Letter II at 12. *See also infra* notes 609–611 and accompanying text (describing a commenter's suggestion that the Commission remove reporting of E/Q for all orders and not add price improvement statistics for non-marketable group orders).

[566] See Virtu Letter II at 12.

[567] Id.

[568] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

[569] *See id.*

[570] *See id.*

[571] *See infra* note 1209 and accompanying text.

[572] *See* prior 17 CFR 242.605(a)(1)(i)(K) and (a)(1)(ii)(A).

[573] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023).

[574] *See id.* at 3816-17.

[575] *See* Better Markets Letter at 8.

[576] *See* FIF Letter at 29.

[577] *See id.*

The Commission continues to believe including percentage-based statistics for effective spread and realized spread, in addition to the dollar-based statistics in the existing report, will account for differing underlying stock prices and better facilitate comparisons of spread statistics across different time periods and securities.[578] In order to simplify the definitions and eliminate ambiguity about how to calculate percentage-based spread statistics, and because the Commission is requiring the separate disclosure of an average midpoint statistic as described below, the Commission is modifying the adopted definitions of ''average percentage effective spread'' and ''average percentage realized spread'' to use defined terms. As proposed, both percentage-based spread statistics would have been share-weighted and used as their denominator the midpoint of the national best bid and national best offer at the time of order receipt or, for non-marketable limit orders, beyond-the-midpoint limit orders, and orders submitted with stop prices, at the time such orders first become executable.[579]

A commenter stated it interpreted the definition of share-weighted average percentage spread as the ratio of share-weighted effective spread divided by share-weighted midpoint.[580] However, based on the commenter's interpretation, the Commission acknowledges that it is ambiguous whether the modifier ''share-weighted'' in the proposed amendment applied to: (1) the percentage calculation (*i.e.*, calculating the percentage effective spread or percentage realized spread for each transaction and then share-weighting such percentage); [581] or (2) each of the denominator and the numerator (*i.e.,* calculating the share-weighted average effective or realized spread and dividing that by the share-weighted midpoint).[582] Therefore, in order to simplify these definitions and eliminate ambiguity as to how percentage-based spread statistics will be required to be calculated, and consistent with the commenter's interpretation of how to calculate this statistic, the Commission is modifying the definitions of ''average percentage effective spread'' and ''average percentage realized spread'' from the definitions proposed.

Specifically, ''average percentage effective spread'' will be defined as the average effective spread [583] for order executions divided by the average midpoint for order executions.[584] ''Average percentage realized spread'' will be defined as the average realized spread [585] for order executions divided by the average midpoint for order executions.[586] As proposed, the definitions of ''average percentage effective spread'' and ''average percentage realized spread'' used as their numerators the share-weighted effective spread and the share-weighted realized spread, respectively.[587] However, because ''average effective spread'' and ''average realized spread'' are defined as share-weighted averages, the Commission is instead using the defined terms ''average effective spread'' and ''average realized spread'' as the numerator in order to simplify the adopted definitions of ''average percentage effective spread'' and ''average percentage realized spread.'' Instead of repeating the same definition of average midpoint in each of the percentage-based spread definitions as proposed, the Commission is adopting the defined term ''average midpoint'' and will use this term in the denominator (*i.e.*, average midpoint for order executions). ''Average midpoint'' will be defined as the share-weighted average of the midpoint of the national best bid and national best offer at either the time of order receipt or, for non-marketable limit orders, midpoint-or-better limit orders, and orders submitted with stop prices, at the time such orders first become executable.[588] The term ''average midpoint'' as applied to order executions will be substantively the same as the proposed denominator for the percentage-based spread statistics.[589] Further, the Commission is adding an average midpoint statistic to the detailed report required by Rule 605(a)(1) so that certain statistics in the summary report—namely, average midpoint and the percentage-based statistics—will be derivable from the detailed report,[590] as suggested by commenters.[591] With the detailed report containing the information necessary to calculate the statistics in the summary report, market participants and other users of the reports will be able to recalculate the statistics in the summary report with different subsets of data.

Finally, the Commission is requiring average percentage effective spread only for marketable order types, marketable stop order types, and midpoint-or-better order types for the same reasons that the Commission is requiring average effective spread only for these order types.[592]

(d) Effective over Quoted Spread (E/Q)

(1) Proposed Approach

Effective over quoted spread (''E/Q'') can be derived from Rule 605 reports required prior to these amendments, but the prior Rule did not require the reporting of E/Q or quoted spread.[593] The Commission proposed to require, for executions of all covered orders, that reporting entities report the average E/Q, expressed as a percentage, for all marketable and non-marketable order types.[594] The proposed definition ''average effective over quoted spread'' would have required the computation of a share-weighted average E/Q by dividing effective spread by quoted spread for each transaction and then averaging that over the month (weighted by number of shares).[595] The quoted spread would have been the difference between the national best bid and the national best offer at either the time of order receipt (for marketable order types) or the time an order first becomes executable (for non-marketable order types).[596]

(2) Final Rule and Discussion

The Commission is adopting a statistic for average E/Q, expressed as a percentage, but with a modified

[578] *See* Proposing Release, 88 FR 3786 at 3816-17 (Jan. 20, 2023).

[579] *See id.* at 3817; proposed Rule 600(b)(11) (average percentage effective spread) and proposed Rule 600(b)(12) (average percentage realized spread).

[580] *See supra* note 577.

[581] *See* Proposing Release, 88 FR 3786 at 3817, n.392 (Jan. 20, 2023) and accompanying text (stating the percentage would be averaged on a share-weighted basis).

[582] *See id.* at 3816–17 (stating ''this [referring to the denominator] would then be averaged on a share-weighted basis for the month'').

[583] *See* final 17 CFR 242.600(b)(8).

[584] *See* final 17 CFR 242.600(b)(10). *See also* 17 CFR 242.600(b)(9) (defining average midpoint).

[585] *See* final 17 CFR 242.600(b)(13).

[586] *See* final 17 CFR 242.600(b)(11).

[587] *See* Proposing Release, 88 FR 3786 at 3816 (Jan. 20, 2023); proposed Rule 600(b)(11) (average percentage effective spread) and proposed Rule 600(b)(12) (average percentage realized spread).

[588] *See* final 17 CFR 242.600(b)(9). The Commission is modifying the order types listed in the definition of average midpoint from the definition that was proposed to be included in both percentage-based spread statistics in order to conform to the order types adopted herein. *See supra* section III.B.2.

[589] The definition includes ''share-weighted'' to make clear that average midpoint is also a share-weighted statistic. *See* final 17 CFR 242.600(b)(9).

[590] *See* final 17 CFR 242.605(a)(1)(i)(Y); final 17 CFR 242.605(a)(2)(vi), (vii), (viii), (x), and (xi).

[591] *See infra* note 769 and accompanying text.

[592] *See supra* notes 568–571 and accompanying text.

[593] *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023).

[594] *See id.* E/Q is generally expressed as a percentage that represents how much price improvement an order received. An E/Q of 100% means a buy order was executed at the national best offer or a sell order was executed at the national best bid, and an E/Q of 0% means an order was executed at the midpoint of the NBBO. *See id.*

[595] *See id.*

[596] *See id.*

weighting methodology to utilize spread-based weighting rather than the proposed weighting methodology of share-weighting the E/Q for each transaction. In addition, the Commission is making the average E/Q statistic applicable to marketable order types, marketable stop order types, and midpoint-or-limit order types only, instead of all order types. Further, the Commission is adding a requirement to include average quoted spread, which is the denominator of average E/Q, in the detailed reports required pursuant to Rule 605(a)(1).

A financial services firm stated that E/Q is a ''very common metric used within the industry to judge execution quality'' and that it ''does a good job of providing a normalized comparison of price improvement relative to the price improvement opportunity.'' [597]Another financial services firm stated that ''E/Q directly quantifies how much of the spread the broker secures for its investor-client'' and ''[i]ncluding E/Q on Rule 605 reports will enable investors to make 'apples to apples' comparisons of execution quality.'' [598] In addition, an investor advocacy group stated that requiring a separate field in Rule 605 reports for E/Q allows market participants to compare price improvement statistics across securities and across market centers and broker-dealers.[599]

However, several commenters recommended that the Commission require spread-based weighting, rather than share-based weighting, for the calculation of average E/Q and indicated that the industry uses spread-based weighting when calculating E/Q.[600] One industry group stated that spread-based weighting ''results in the same amount of E/Q being reported for the same aggregate dollar amount of E/Q being provided.'' [601] This commenter further stated that the method of weighting can influence the reported E/Q metrics and, using share-based or notional-based weighting, a firm that provides a lower aggregate dollar amount of price improvement relative to a second firm could result in the first firm reporting a lower E/Q than the second firm, even though this lower E/Q would not reflect that customers received better executions.[602] Another industry group stated that a share-weighting formula would tend to weigh sub-dollar stocks more heavily and could allow a firm to manipulate its average E/Q by adjusting the type of stocks for which it provides better price improvement.[603] This commenter also stated that using a spread-weighting formula would preserve the relationship between price improvement in dollars and E/Q and therefore the firm's E/Q would remain the same regardless of how the firm distributes its price improvement among different stocks.[604]

Similarly, a financial services firm stated share-weighting detaches E/Q from the ability to understand it in the context of the opportunity for price improvement and this ''opens the door for possible manipulation of results.'' [605] This commenter also stated that wholesalers' discretionary price improvement dollars are fungible and that share-weighting of E/Q would result in an incentive to provide more price improvement on narrow spread securities and less price improvement on wide spread securities.[606] A broker-dealer stated that a share-weighted methodology may incentivize market participants to allocate price improvement to lower priced securities with narrower quote spreads.[607] This commenter recommended the use of a spread-weighted average because a spread-weighted average would be tied to the total price improvement delivered in dollars and unaffected by how that price improvement is allocated among different symbols.[608]

An industry group and a financial services firm suggested that Rule 605 reports not include E/Q and leave it to users of the report to calculate E/Q from other statistics that are currently included in the reports.[609] The industry group further stated that the Commission was inconsistent when it proposed requiring the reporting of E/Q for non-marketable order types but not requiring the reporting of price improvement statistics for such order types.[610] This commenter provided four alternative approaches to address this perceived inconsistency, but did not recommend two of the alternatives because they required the reporting of E/Q and did not recommend a third alternative because, according to the commenter, price improvement is only a relevant statistic for marketable orders.[611]

After review of the comments, as stated above, the Commission is adopting a requirement that Rule 605 reports include a statistic for average E/Q, expressed as a percentage, but is adjusting the weighting methodology from the proposal. The Commission is adopting a spread-weighted average E/Q statistic, consistent with commenters' suggestions.[612] In addition, the Commission is requiring average E/Q only for marketable order types, marketable stop order types, and midpoint-or-better order types, rather than all order types as proposed. Because spread-weighted average E/Q is the same as average effective spread divided by average quoted spread, in lieu of creating a separate definition for ''average effective over quoted spread'' as proposed, Rule 605 as adopted specifies that the required statistics for marketable order types, marketable stop order types, and midpoint-or-better order types include, for executions of covered orders, the average effective spread divided by the average quoted spread, expressed as a percentage.[613] The Commission is also requiring that Rule 605 reports include a reported statistic for average quoted spread and is defining ''average quoted spread'' as the share-weighted average of the difference between the national best offer and the national best bid at the time of order receipt or, for order executions of non-marketable limit orders,[614] the difference between the

[597] Schwab Letter II at 31.

[598] Vanguard Letter at 4.

[599] *See* Better Markets Letter at 8.

[600] *See* FIF Letter at 23; SIFMA Letter II at 27; Schwab Letter II at 31; Schwab Letter III at 4; Rule 605 Citadel Letter at 5.

[601] FIF Letter at 23.

[602] *See id.* at 23–24.

[603] *See* SIFMA Letter II at 27.

[604] *See id.*

[605] Schwab Letter III at 4.

[606] *See* Schwab Letter II at 31; Schwab Letter III at 4.

[607] *See* Rule 605 Citadel Letter at 5.

[608] *See id.* This commenter provided examples of how the same amount of price improvement in dollars can generate different share-weighted average E/Q statistics depending on the symbols to which it is allocated, whereas spread-weighting yields the same E/Q in each scenario. *See id.* at 5, 13.

[609] *See* FIF Letter at 20–21 (stating that for marketable order types, it is not necessary to include E/Q in the detailed reports required by Rule 605(a)(1) because E/Q can be derived from other data that is already included and this data, specifically, is found in the price improvement, price dis-improvement, and effective spread statistics); Schwab Letter II at 31 (suggesting that the reports include effective spread and quoted spread and then allow individuals to compute E/Q).

[610] *See* FIF Letter at 21. As described in supra section III.B.4.b)(2), the Commission is requiring effective spread statistics only for marketable order types, marketable stop order types, and midpoint-or-better order types, rather than all order types as proposed. As described in more detail below, the Commission is requiring E/Q only for these same order types. Further, the required statistics for each of these order types also include price improvement statistics. *See* final 17 CFR 605(a)(1)(ii)(E) through (L). Therefore, there are no order types for which Rule 605 will require the reporting of E/Q but not price improvement statistics.

[611] *See* FIF Letter at 21.

[612] *See* supra notes 600–608 and accompanying text.

[613] *See* final 17 CFR 242.605(a)(1)(ii)(D).

[614] Because the requirement to report average quoted spread applies only to market orders, marketable limit orders, marketable IOCs, marketable stop order types, and the midpoint-or-

national best offer and the national best bid at the time such orders first become executable.[615] Thus, Rule 605 as adopted also will specify that the required statistics for marketable order types, marketable stop order types, and midpoint-or-better order types include, for executions of covered orders, average quoted spread.[616]

The Commission agrees with commenters that the use of a spread-weighting methodology will provide a consistent measure of E/Q that will not vary based on the specific symbols to which price improvement is allocated.[617]The adopted methodology will avoid a potential incentive to allocate price improvement in a manner that would maximize the reported E/Q statistic without changing the total dollar value of the price improvement provided. Thus, the use of a spread-weighted average E/Q is consistent with the Commission's stated goal of facilitating the comparability price improvement statistics across symbols.[618] In addition, the Commission acknowledges that the industry generally uses spread-weighting when calculating E/Q[619] and thus, as stated by a commenter, will provide a ''normalized comparison of price improvement relative to the price improvement opportunity'' [620] that is consistent with existing industry practice.

The adopted definition of ''average quoted spread'' is the same as the description of ''total quoted spread'' that was embedded in the proposed definition of ''average effective over quoted spread,'' with two modifications from the embedded definition as proposed.[621] First, the Commission is specifying that average quoted spread is a share-weighted average. Second, the Commission is limiting the list of order types for which the average quoted spread will be required to be measured at the time the order first becomes executable to conform to the order types being adopted herein. The inclusion of an average quoted spread statistic in Rule 605 reports will provide an additional piece of information that market participants and other users of the reports can use to evaluate execution quality. Moreover, in response to the commenters who stated that E/Q could be calculated using the effective spread and quoted spread statistics and that the Commission should allow users to derive E/Q,[622] as stated in the Proposing Release, E/Q is a relatively simple metric to capture contemporaneously with execution and requiring a separate field for E/Q will increase the ability of market participants to access and utilize E/Q to compare price improvement statistics across securities, and across market centers and broker-dealers.[623]

In addition, because effective spread is a necessary input into E/Q, the Commission is not adopting the application of E/Q to non-marketable order types other than midpoint-or-better order types (and marketable stop order types, which are generally non-marketable orders upon receipt).[624] Accordingly, the Commission will include E/Q within the statistics required for marketable order types, marketable stop order types, and midpoint-or-better order types only.[625]

(e) Size Improvement

(1) Proposed Approach

Prior to the amendments, Rule 605 reports included price improvement metrics but did not include any statistics that directly measured whether orders received an execution of more than the displayed size at the quote.[626] The Commission proposed adding a benchmark metric that would, in combination with information about shares executed, indicate the level of ''size improvement,'' *i.e.,* the extent to which orders received an execution at prices at or better than the quote for share quantities greater than the displayed size at the quote.[627] Specifically, the Commission proposed requiring the reporting of the cumulative number of shares of the full displayed size of the protected bid at the time of execution, in the case of a market or limit order to sell; and of the full displayed size of the protected offer at the time of execution, in the case of a market or limit order to buy.[628] As proposed, for each order, the share count would have been capped at the order size if the full displayed size of the national best bid or national best offer is larger than the order.[629] The Commission explained that the proposed size improvement benchmark metric could be combined with information about the number of shares executed at or above the quote to measure a market center or broker-dealer's ability to offer customers execution at the quote (or better), even when there is no depth available at that price.[630]

(2) Final Rule and Discussion

The Commission is adopting a modified version of the proposed size improvement benchmark metric that measures the displayed size at the time of order receipt (or the time the order becomes executable for midpoint-or-better order types) instead of measuring the displayed size at the time of order execution as proposed. The Commission is also modifying the proposed size improvement benchmark metric by having it apply only to marketable order types, marketable stop order types, and midpoint-or-better order types rather than all order types, as proposed. Finally, based on comments received, the Commission is adopting an additional size improvement metric (as discussed below, ''size improved outsized shares'') that was not part of the proposal and indicates the amount of size improvement in those instances in which an order could have received size improvement.

Several commenters supported adding a requirement that Rule 605 reports include the proposed size improvement benchmark metric.[631] A broker-dealer

better order types, the only non-marketable limit orders this will apply to are the midpoint-or-better order types and marketable stop order types (which are non-marketable until triggered). *See* final 17 CFR 242.605(a)(1)(ii)(A).

[615] *See* final 17 CFR 242.600(b)(12); final 17 CFR 242.605(a)(1)(ii)(A); final 17 CFR 242.605(a)(2)(viii). See also infra notes 817–827 and accompanying text for discussion of E/Q and quoted spread statistics in the summary report.

[616] *See* final 17 CFR 242.605(a)(1)(ii)(A).

[617] *See supra* notes 600–608 and accompanying text.

[618] *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023).

[619] *See supra* note 600 and accompanying text.

[620] *See supra* note 597.

[621] *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023). The substantive difference between the two is that ''average quoted spread'' as adopted will reflect the share-weighted average of quoted spreads of all transactions for the month within a reporting category, whereas ''average effective over quoted spread'' would have divided effective spread by quoted spread for each transaction and then used a share-weighted average of that number over the month. *See id.*

[622] *See supra* note 609.

[623] *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023). *See also infra* notes 1534–1537 (discussing that the concern in the Proposing Release that extrapolating an average E/Q using average effective spread and average quoted spread may lead to a noisier level of E/Q is no longer relevant with the use of a spread-weighted average E/Q).

[624] *See supra* section III.B.4.b)(2).

[625] *See* final 17 CFR.605(a)(1)(ii)(D).

[626] Although share-weighted effective spread metrics may provide information about size improvement because effective spread will be larger for orders that have to ''walk the book'' (*i.e.,* consume available depth beyond the best-priced quotes), effective spread combines both price and size information. *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023).

[627] *See id.* at 3818.

[628] *See id.;* proposed Rule 605(a)(1)(i)(F).

[629] *See* Proposing Release, 88 FR 3786 at 3818 (Jan. 20, 2023); proposed Rule 605(a)(1)(i)(F).

[630] *See* Proposing Release, 88 FR 3786 at 3818 (Jan. 20, 2023).

[631] *See* Pritchard Letter; SIFMA Letter II at 25; SIFMA AMG Letter at 6; Rule 605 Citadel Letter at

Continued

stated that the proposed size improvement metric would provide market participants with important information about an additional dimension of execution quality that is not captured by current Rule 605 statistics.[632] According to this commenter, this metric will be particularly beneficial for retail investors seeking to accurately assess execution quality delivered by wholesale broker-dealers.[633] Another broker-dealer stated that size improvement is a ''substantial benefit'' offered by broker-dealers and market makers to retail orders and ''its absence in Current Rule 605 reports means that execution quality is significantly undercounted.'' [634] This commenter requested an explanation of how fractional share orders should be addressed in certain statistics, for example size improvement statistics.[635] Another commenter stated that it supported the addition of a size improvement metric because of its significant impact on transaction costs for retail investors.[636]

An industry group stated that it agreed with the Commission on the value of including size improvement statistics, but opposed measuring size improvement based on the number of shares available at the time of execution.[637] Instead, this commenter recommended measuring size improvement against the full displayed size at the opposite side of the NBBO as of the time of order receipt (for marketable group orders) or as of the time an order becomes executable (for non-marketable group orders).[638] This commenter presented three scenarios to illustrate why it supports measuring size improvement against the full displayed size at the time of order receipt rather than at the time of execution.[639] This commenter also stated that it assumes that where an order has multiple executions, the Commission would require adding the displayed size to the benchmark metric at the time of each execution, rather than counting the displayed size for only one execution.[640]

Further, this commenter stated that a market could have protected bids and offers that are not represented in the NBBO but are at the same price as the NBBO, and these bids and offers are included in Level 1 market data.[641] This commenter also stated that it understands that when the Commission refers to the cumulative number of shares of the full displayed size of the protected bid or offer, the Commission is including in this number shares of protected bids and offers that are not represented in the NBBO but are at the same price as the NBBO.[642]

A broker-dealer stated that the proposal ''falls well short of including the necessary statistics to reflect the benefits of size improvement.'' [643] This commenter stated that the proposed size improvement metric would be inadequate because it would include all orders in the calculation, even when there is no opportunity to provide size improvement, and thereby would dilute the amount and obfuscate the value of size improvement provided when the need for size improvement actually exists.[644] This commenter suggested the following alternative metrics that, in its view, would more accurately reflect size improvement benefits obtained by each broker for its retail investor customers: (1) the number of orders for which the order size exceeded the available shares displayed on the relevant side of the NBBO (''outsized orders''); (2) the total number of shares executed as part of these outsized orders; and (3) the number (or percentage) of shares within the outsized orders that received size improvement (*i.e.,* were executed at or better than the NBBO price, in excess of the amount of aggregate displayed liquidity at the NBBO).[645]

As discussed in the Proposing Release, this commenter also suggested in a petition for rulemaking to the Commission that Rule 605 should include an alternative metric, referred to as ''real price improvement'' (''RPI''), that combines price improvement with size improvement by using as its benchmark a price that reflects the equivalent size of shares-including depth of book quotes and odd-lot quotes.[646] When the Commission described why it was not proposing to include an RPI benchmark or metric in the proposed rule, the Commission stated that although RPI may be a more informative measure of size improvement than a measure that can be calculated using the proposed size improvement benchmark metric, the RPI would require market centers and reporting broker-dealers to subscribe to all exchanges' proprietary depth-of-book data feeds and would entail a ''significant cost'' to reporting entities that did not already subscribe to these feeds.[647] Therefore, the Commission preliminarily believed that the benefits to market participants of having an RPI metric were not justified by the potentially significant additional costs to reporting entities.[648]

In commenting on this rulemaking, this commenter again suggested that the Commission add an RPI benchmark or metric to Rule 605 and responded to the Commission's statement that such measure could be too costly for market participants who would need to subscribe to exchanges' depth-of-book data feeds.[649] According to this

11; CCMR Letter at 13. *See also* Nasdaq Letter at 44 (stating that size improvement opportunities are significant and relevant to best execution decisions).

[632] *See* Rule 605 Citadel Letter at 11.

[633] *See id.* (stating that, according to a recent study, factoring in size improvement more than doubled the dollar amount of price improvement reported by wholesale broker-dealers).

[634] Robinhood Letter at 46–47. This commenter opposed the proposed changes to Rule 605 but suggested expanding Rule 606 reports to add a column for size improvement, among other execution quality metrics. *See id.* at 42–43.

[635] *See id.* at 48 (asking how the displayed size and the time of execution of fractional share orders would be counted for purposes of the size improvement benchmark).

[636] *See* CCMR Letter at 13.

[637] *See* FIF Letter at 20.

[638] *See id.* This commenter stated that this method is how other statistics in the report, such as effective spreads, are measured. *See id.*

[639] *See* FIF Letter II at 4–7. In the first scenario, the customer's order size is larger than the displayed size, and the commenter states its suggested approach would reflect this oversizing and provide for a more accurate comparison across brokers that receive customer orders that, on average, oversize the NBBO by different percentages. *See id.* at 4–5. In the second scenario, the customer's order size is larger than the displayed size and results in price dis-improvement, and the commenter states that its suggested approach would require the broker-dealer to report price dis-improvement but would also include data to reflect that the broker-dealer received an order that oversized the opposite-side NBBO. *See id.* at 5–6. In the third scenario, a broker-dealer is delayed in executing the customer's order due to a systems issue and the executed size is the same as the displayed size at the time of order receipt but larger than the displayed size at the time of order execution, and the commenter states that its suggested approach would correctly reflect that the broker-dealer did not provide size improvement. *See id.* at 6–7.

[640] *See id.* at 5, n.10, and 6, n.11.

[641] *See* FIF Letter at 20.

[642] *See id.*

[643] Virtu Letter II at 5.

[644] *See id.* at 10.

[645] *See id.* According to this commenter, these metrics would be more informative because they would not include orders in which there was no need to provide size improvement. *See id.*

[646] *See* Proposing Release, 88 FR 3786 at 3818 (Jan. 20, 2023) (*citing* Virtu Petition at 3).

[647] *See id.*

[648] *See id.* at 3818–19.

[649] *See* Virtu Letter II at 7 (''To truly and accurately measure execution quality, Rule 605 disclosures should be updated to compare fill prices for all orders to the average price in the market to fill the same number of shares considering all displayed quotes—including NBBO, depth of book, and odd lots.''), 10 (''To properly reflect the value of size improvement benefits that brokers obtain for retail investors, Rule 605 should measure an order's execution price that is the volume-weighted average price ('VWAP') for an equivalent quantity of shares based on the shares available across exchanges.'').

commenter, many brokers utilize vendors to produce Rule 605 reports and these vendors are capable of handling depth-of-book data.[650] This commenter also stated that ''if the Commission's proposed tick size reductions are adopted, there would be less liquidity at the NBBO, and investors who currently use SIP data would have less visibility into market liquidity and would need to access the exchanges' depth-of-book data feeds anyway.''[651] Another commenter suggested that the Commission undertake a more detailed analysis of the costs and benefits of requiring RPI statistics in Rule 605 reports and that the Commission should require the reporting of RPI information if this analysis ''indicates that the benefits . . . outweigh the costs.''[652] According to this commenter, the Commission did not quantify either the costs of requiring reporting entities to have access to a full set of consolidated depth information or the benefits of providing this additional information about size improvement to market participants.[653] Finally, one commenter stated that ''[p]rice improvement should be measured relative to the displayed book, not the NBBO. Odd lots are ignored in the calculation of the NBBO.''[654]

An investor advocacy group recommended eliminating the proposed size improvement metric until such a time when the public data feed contains more information regarding the depth of quotations.[655] According to this commenter, accurately identifying size improvement would require proprietary depth of book feeds, and if the size improvement statistic relied solely on the SIP it would be misleading because it would not reflect the top of book across public quotes or hidden or mid-point priced orders.[656] A group of academics stated that some of the proposed disclosure requirements, such as size improvement, may be helpful for a subset of trades, but recommended limiting changes to Rule 605 to a more limited set of statistics to reduce implementation costs and speed up adoption.[657]

The Commission considered the comments and, in response to commenter feedback, is modifying the proposed size improvement benchmark metric and adding an additional size improvement metric. Further, the Commission is requiring the disclosure of both size improvement metrics only for marketable order types, marketable stop order types, and midpoint-or-better order types, rather than for all order types as proposed. To implement these changes, the Commission is adopting a defined term for the size improvement benchmark metric—the ''order size benchmark.'' As adopted, ''order size benchmark'' means the number of shares of the full displayed size of all protected bids at the same price as the national best bid at the time of order receipt, in the case of a market or limit order to sell, or the full displayed size of all protected offers at the same price as the national best offer at the time of order receipt, in the case of a market or limit order to buy.[658] For marketable stop order types and midpoint-or-better order types, the full displayed size is measured at the time the order becomes executable rather than the time of order receipt.[659] For each order, the share count is capped at the order size.[660] The Commission is also modifying the proposed Rule 605(a)(1) metrics to require the reporting of, for executions of covered orders, the cumulative number of shares of the order size benchmark.[661] The term ''order size benchmark'' is the same as the proposed size improvement benchmark metric, except in the following two respects.

First, in response to the commenter who recommended the size improvement benchmark be captured at the time of order receipt,[662] the Commission is modifying the time at which the order size benchmark measures the available displayed size on the opposite side of the NBBO. Instead of measuring the displayed size at the time of execution as proposed, the order size benchmark in the final rule measures displayed size at the time of order receipt, for market and marketable limit orders, and at the time an order becomes executable, for marketable stop order types and midpoint-or-better order types. Capturing the displayed size of the opposite side quote at the time of order receipt (or the time of executability for marketable stop order types and midpoint-or-better order types) provides a view of the available size at the time an order could first reasonably be expected to execute and therefore provides users of the Rule 605 data information relating to which market centers and broker-dealers are more likely to be able to fill orders in a size larger than what may be readily available. Using the time of order receipt (or time the order becomes executable) as in the final rule will simplify calculation of the order size benchmark because there will be one relevant time for each order, even if that order results in multiple executions. In contrast, if the Commission required calculation of the order size benchmark at the time of execution as proposed, an order with multiple executions would have different times of execution for different portions of the order. The Commission also agrees with the commenter that measuring the displayed size at the time of execution could result in a less accurate picture of size improvement in some instances,[663] particularly if some shares priced at the opposite side of the NBBO are displayed at the time of order receipt and then lifted before the time of execution.[664]

Second, the Commission is adopting a modification to make clear that the order size benchmark measures the full displayed size of all shares at the same price as the protected bid or offer (as applicable).[665] The Commission agrees with the commenter that the share count should be required to include not just those shares that are represented in the NBBO but also shares of protected bids

[650] *See id.* at 10.

[651] *Id.* The Commission is still considering the proposed changes discussed in the Minimum Pricing Increments Proposing Release, including changes to tick sizes. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 (Dec. 29, 2023). The Commission will consider comments regarding whether changes to tick sizes would lead to changes in the use of depth-of-book feeds in the context of that proposal.

[652] *See* CCMR Letter at 16. *See also id.* at 15 (stating that current Rule 605 disclosures fail to consider that there is a limited size available at the NBBO on exchanges, thus failing to account for size improvement, and price improvement should be measured with reference to the average price obtainable for the full order on the exchange, not just with reference to the NBBO).

[653] *See id.* at 16 (*citing* Proposing Release, 88 FR 3786 at 3894 (Jan. 20, 2023)).

[654] Angel Letter at 3.

[655] *See* Healthy Markets Letter at 18.

[656] *See id.*

[657] *See* Professor Schwarz et al. Letter at 5.

[658] *See* final 17 CFR 242.600(b)(72).

[659] *See id.*

[660] *See id.*

[661] *See* final 17 CFR 242.605(a)(1)(ii)(R).

[662] *See supra* notes 637–639 and accompanying text.

[663] *See supra* note 637. This commenter also provided several scenarios presenting how the presentation of size improvement statistics would differ if size improvement is measured against the full displayed size at the time of order receipt (as suggested by the commenter) or the time of execution (as proposed). *See supra* note 639 and accompanying text. As described, final Rule 605 measures size improvement at the time of order execution.

[664] *See supra* note 639. In response to the commenter's request for clarification about how to calculate size improvement for fractional shares (*see supra* note 635 and accompanying text), the order size benchmark is capped at the size of the order and therefore in the case of a fractional share order where the displayed size exceeds the order size, the order size benchmark will reflect the fractional size of the order. *See* final 17 CFR 242.600(b)(72). The commenter's question about how to calculate time of execution is moot because the adopted rule will measure the size improvement statistics at the time of order receipt rather than the time of execution.

[665] *See* final 17 CFR 242.600(b)(72).

and offers that are not represented in the NBBO but are at the same price as the NBBO.[666] Reporting entities will be able to capture information about these shares without relying on proprietary depth-of-book feeds because the SIP includes all protected bids and offers.

The Commission considered commenter's suggestions for alternative size improvement metrics.[667] In response to the commenter's recommendation to include the number of shares executed as part of outsized orders, the Commission observes that, using the Rule 605 statistics as adopted, it is possible to calculate the number of shares eligible for size improvement (''outsized share count'') for any row of Rule 605 data by taking the cumulative number of shares of covered orders received and subtracting the cumulative number of shares of the order size benchmark.[668] Although the outsized share count that can be calculated using Rule 605 statistics as adopted differs slightly from the commenter's recommended metric, it similarly addresses commenter's criticism that the order size benchmark includes orders in which the reporting entity does not have the opportunity to provide size improvement because the order size is equal to or less than the available shares at the NBBO.[669] The Commission is not adopting the commenter's suggestion to include the number of outsized orders in the Rule 605 statistics because the number of outsized orders alone is less meaningful when this information is aggregated across orders.[670] Instead, the outsized share count, which will be derivable from the Rule 605 statistics as adopted, will provide a metric that is more useful for comparison purposes when aggregated.

The Commission agrees with the commenter that it would provide useful information to add a size improvement metric that will measure the level of size improvement in those instances in which the order presents an opportunity for size improvement.[671] Therefore, the Commission is adopting an additional Rule 605 statistic that will require reporting of the sum of, for each execution of a covered order, the greater of: the total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark; or zero (the ''size improved outsized shares'').[672] For each execution of a covered order, the total number of shares executed with price improvement plus the total number of shares executed at the quote represents the number of shares executed at or better than the opposite side of the NBBO at the time of order receipt (or executability). Subtracting the order size benchmark from that sum represents the extent to which the reporting entity provided such executions at a size greater than the displayed size at the quote. The resulting number can be negative if a reporting entity does not provide an execution at or better than the NBBO for the full number of displayed shares at the opposite side of the NBBO (*i.e.,* there is ''size dis-improvement''). However, the size improved outsized shares metric is designed to capture the extent to which the reporting entity achieves size improvement when an order presents an opportunity for size improvement and as such will never be negative. Instead, for each execution of a covered order, the size improved outsized shares metric will be the greater of the described calculation and zero. As an example, assume the protected NBBO for a security is $5.00–$5.05. If a market center receives a 400-share market order to sell and executes all 400 shares at $5.00, and there were 300 shares displayed at the national best bid at the time of order receipt, the order size benchmark will be 300 shares. To continue this example, the size improved outsized shares will be the greater of 100 shares (*i.e.,* 400 shares minus 300 shares) and zero shares, and thus the size improved outsized shares will be 100 shares.[673] As a second example, assume the protected NBBO for a security is $10.00–$10.10. If a market center receives a 300-share market order to buy but only executes 100 shares at $10.10 and there were 200 shares displayed at the national best offer for $10.10 at the time of order receipt, the order size benchmark will be 200 shares. To continue this example, the size improved outsized shares will be the greater of −100 shares (*i.e.,* 100 shares minus 200 shares) and zero shares, and thus the size improved outsized shares will be zero shares.

Where the size improved outsized shares will differ from information derivable from other execution quality statistics in final Rule 605 is in cases where there is size dis-improvement, which may occur when some shares execute at prices worse than the quote or do not execute even though a sufficient number of shares are displayed at the quote. With respect to the information that can be derived from other Rule 605 statistics, as discussed in the Proposing Release, the order size benchmark can be compared to the number of shares executed at or better than the quote to calculate whether the reporting entity filled any portion of the customer order at the opposite side of the NBBO (or better), even when insufficient depth was available at that price (''net size improvement'').[674] Unlike the size improved outsized shares, the net size improvement will take into account instances of size dis-improvement and, in such instances, will take into account negative values.[675] To continue the second example above, where the market center is able to fill 100 shares at $10.10 but the depth available at the protected offer is 200 shares, the net size improvement will be −100 shares (*i.e.,* 100 shares minus 200 shares).

The ability to compare size improved outsized shares and net size improvement will contain useful information for market participants as well. For example, market participants will be able to use this variable to tell the difference between a market center that has a net size improvement value

[666] *See supra* notes 641–642 and accompanying text.

[667] *See supra* notes 645–653 and accompanying text.

[668] *See* final 17 CFR 242.605(a)(1)(i)(C); final 17 CFR 242.605(a)(1)(ii)(R).

[669] *See* Virtu Letter II at 10.

[670] For further discussion of the Commission's consideration of alternative size improvement measures, *see infra* section IX.E.3.d)(3).

[671] *See supra* note 645 and accompanying text.

[672] *See* final 17 CFR 242.605(a)(1)(ii)(S).

[673] The Commission is not adopting a metric that would reflect the percentage of shares within outsized orders that received size improvement because it will be possible to calculate this percentage using the outsized share count and the size improved outsized shares.

[674] *See* Proposing Release, 88 FR 3786 at 3818 (Jan. 20, 2023) (discussing the ''size improvement share count''). To better distinguish this term from size improved outsized shares, the Commission is using the term ''net size improvement'' herein instead of ''size improvement share count.''

[675] In cases where the best displayed quote equals or exceeds the order size (*i.e.,* where there is no opportunity to provide size improvement), the size improved outsized shares will always be zero. In contrast, the net size improvement will not be negative in instances in which the depth at the best displayed quote exceeds the customer-requested order size because the share count used to calculate the order size benchmark will be capped at the order size. The Commission's analysis of the correlation between the proposed measure of size improvement and this additional measure of size improvement indicates that including information about size improved outsized shares will likely provide information that is not available from the net size improvement. *See infra* note 1548 and accompanying text; Table 8. This analysis also indicates that these size improvement metrics convey different information about execution quality than the price improvement metrics contained in Rule 605 reports prior to these amendments, particularly for orders received by off-exchange market centers. *See infra* note 1548 and accompanying text; Table 8.

of zero because it does not offer size improvement, or because it offers a mix of size improvement and size dis-improvement. This will be informative for market participants that are concerned about the risk of receiving size dis-improvement. Market participants and other users of Rule 605 reports will be able to divide the size improved outsized shares by the net size improvement to obtain a ratio that informs about the extent to which a reporting entity is executing orders with size dis-improvement. The higher the ratio (*i.e.,* the higher it is above 1), the more size dis-improvement occurred. For example, assume a market participant compares two market centers for a particular order type, size, and security and calculates that Market Center 1 has net size improvement of 2,500 and size improved outsized shares of 4,000; and Market Center 2 has net size improvement of 5,000 and size improved outsized shares of 6,000. To continue this example, Market Center 1 would have a ratio of 8/5 (*i.e.,* 4,000/2,500) and Market Center 2 would have a ratio of 6/5 (*i.e.,* 6,000/5,000), indicating that orders received size dis-improvement more frequently on Market Center 1 than on Market Center 2.[676] In addition, market participants can standardize the size improved outsized shares by dividing this metric by the outsized share count.[677]

Finally, the Commission is limiting the application of the size improvement metrics to marketable order types, marketable stop order types, and midpoint-or-better order types, rather than to all order types as proposed. The order size benchmark is more useful in conjunction with information about the number of shares executed at, better than, or worse than the NBBO,[678] and these statistics are available only for marketable order types, marketable stop order types, and midpoint-or-better order types in Rule 605 as amended. Further, the size improved outsized shares metric is more informative when it can be compared to net size improvement and providing information about size improved outsized shares without a view of net size improvement could be misleading. In addition, NMLOs generally do not have an expectation of execution at the price of the protected quote at the time of order receipt and therefore providing information about the size available at that price is less informative.[679] Therefore, the Commission is not requiring the order size benchmark or the size improved outsized shares metric for non-marketable order types other than midpoint-or-better order types.

The Commission is not adopting a metric based on RPI.[680] As the Commission stated in the Proposing Release, RPI would require market centers and reporting broker-dealers to subscribe to all exchanges' proprietary depth-of-book feeds and these subscriptions would entail a significant cost for those reporting entities that do not already subscribe to the feeds.[681] Although a commenter states that many broker-dealers use vendors to prepare Rule 605 reports that can handle depth-of-book data,[682] Rule 605 does not require use of a vendor and the Commission does not assume that all reporting entities will choose to use a vendor. Moreover, if vendors need to subscribe to all exchanges' proprietary depth-of-book feeds for purposes of preparing Rule 605 reports, these vendors may pass on these costs to the reporting entities.

In response to the commenter's suggestion that the Commission should not adopt Rule 605 metrics concerning size improvement, among others, because of concerns about implementation costs and adoption speed,[683] reporting entities will have the underlying raw data necessary to calculate the order size benchmark and the new size improved outsized shares metric because they are already capturing this information for trade confirmations or internal purposes or will be easily able to obtain this information from publicly available data sources. Therefore, the inclusion of these metrics in Rule 605 reports will not make a significant difference in the costs or amount of time needed to implement the changes to Rule 605 being adopted.

(f) Riskless Principal

(1) Proposed Approach

In effecting riskless principal transactions, a market center or broker-dealer submits a principal order to an away market center in order to fulfill a customer order. Upon execution at the away market center, the market center or broker-dealer that initially received the customer order (*i.e.,* the receiving market center or broker-dealer) executes the customer transaction on the same terms as the principal execution. Prior to these amendments, a market center that executed the riskless principal leg of the trade (*i.e.,* the receiving market center's execution of the customer order on the same terms as the principal transaction) generally should have reported those orders in its Rule 605 statistics as part of the cumulative number of shares of covered orders that were executed at the receiving market center under Rule 605(a)(1)(i)(D), rather than as a part of the cumulative number of shares of covered orders executed at any other venue under Rule 605(a)(1)(i)(E).[684] The Commission proposed to carve riskless principal orders out from Rule 605(a)(1)(i)(D) by providing that the number of shares of covered orders executed at the receiving market center, broker, or dealer excludes shares that the market center, broker, or dealer executes on a riskless principal basis.[685] As a result, the market center that executes the riskless principal order would have included these shares as part of the cumulative number of shares executed away from that venue under Rule 605(a)(1)(i)(E), and only the market center that executes the corresponding principal order would have included those shares as part of the cumulative number of shares

[676] In this simplified example, it is possible to compare the overall size improvement percentage (calculated by dividing the net size improvement by the outsized share count) to the size improvement outsized shares percentage (calculated by dividing the size improved outsized shares by the outsized share count) to see the difference between these two metrics. To continue the above example, assume that Market Center 1 has an outsized share count of 10,000 and Market Center 2 has an outsized share count of 20,000. Market Center 1 and Market Center 2 would each have 25% overall size improvement, indicating that Market Center 1 and Market Center 2 achieved similar amounts of overall size improvement. Market Center 1 would have 40% size improved outsized shares and Market Center 2 would have 30% size improved outsized shares. Market Center 1's higher size improved outsized shares percentage, combined with the fact that it has the same overall size improvement percentage as Market Center 2, indicates that orders received size dis-improvement more frequently on Market Center 1 than Market Center 2.

[677] *See infra* note 1547 and accompanying text.

[678] *See* final 17 CFR 242.605(a)(1)(ii)(E), (H), and (I). For example, the count of shares executed at or better than the NBBO is necessary to calculate net size improvement.

[679] Information about the size available at the protected quote may be more informative for midpoint-or-better order types because the Commission understands that some traders submit inside-the-quote limit orders with the intention of executing immediately.

[680] For further discussion of the RPI metric, *see infra* section IX.E.3.d)(1).

[681] *See* Proposing Release, 88 FR 3786 at 3818 (Jan. 20, 2023).

[682] *See supra* note 650 and accompanying text.

[683] *See supra* note 657 and accompanying text.

[684] *See* Proposing Release, 88 FR 3786 at 3819 (Jan. 20, 2023). In the Proposing Release, the Commission stated that Commission staff has taken the position that the market center executing an order as riskless principal should reflect the order on its monthly report as executed at such market center, and not at another venue, using the time that the order was executed at such market center. *See id.* (*citing* Staff Legal Bulletin No. 12R, ''Frequently Asked Questions About Rule 11Ac1–5'' (June 22, 2001)).

[685] *See id.;* proposed Rule 605(a)(1)(i)(D).

executed *at* the receiving market center under proposed Rule 605(a)(1)(i)(D).

(2) Final Rule and Discussion

The Commission is adopting the requirement that the calculation of the number of shares of covered orders executed at the receiving market center, broker, or dealer will exclude shares executed on a riskless principal basis as proposed, for the reasons described in the Proposing Release.[686] Therefore, a receiving market center, broker, or dealer will reflect the execution of the principal order as executed at any other venue.[687] For example, Market Center 1 receives a customer order for 100 shares that it executes on a riskless principal basis. Market Center 1 sends a corresponding principal order of 100 shares to Market Center 2, where it executes in full. Prior to these amendments, Market Center 1 generally would have counted 100 shares as executed at the market center (rather than away). Because Market Center 2 was the execution venue for the corresponding principal order, it also would have counted 100 shares executed at the market center (*i.e.,* at Market Center 2). Under the amendments, Market Center 1 will instead count 100 shares executed away and Market Center 2 will count 100 shares executed at the market center.

A broker-dealer requested clarification regarding the Commission's proposed changes to the treatment of riskless principal orders.[688] This commenter stated that the ''Proposal's suggestion'' that the proposed change would make execution statistics more informative to market participants ''is misleading.'' [689] According to this commenter, execution quality metrics reported under current Rule 605 ''correctly take into account all orders routed to a wholesale broker-dealer (irrespective of where execution occurs) in order to provide a comprehensive view of the market center's overall execution quality'' and ''[t]his would not change under the Proposal.'' [690]

The Commission agrees with the commenter that the execution quality statistics for these shares are already reported as part of Rule 605 reports (*i.e.,* regardless of whether such shares are executed at a market center or away, market centers must include the statistics for such orders). However, modifying whether riskless principal orders are required to be classified as shares executed at a market center, broker, or dealer will make the Rule 605 statistics more informative. If both the market center that executes the riskless principal order and the away market center that executes the corresponding principal order count their legs of the transaction as part of their shares executed at the receiving market center, it could obscure information about how often a market center internalizes an order. As applied to wholesalers, it will be useful for investors to be able to observe what percentage of orders a wholesaler internalizes because internalized orders are not exposed to competition on an order-by-order basis, whereas the principal order associated with a riskless principal transaction may be exposed to trading interest from other market participants. In response to the commenter's request for clarification, the Commission observes that it was referring to only proposed Rule 605(a)(1)(i)(D) and (E) (*i.e.,* the statistics concerning the cumulative number of shares of covered orders executed at the receiving market center, broker, or dealer and executed at any other venue) when it stated in the Proposing Release that Rule 605's execution quality statistics would be more informative if riskless principal orders were reported as executed at another venue.[691]

(g) Price Improvement

(1) Proposed Approach

Preexisting Rule 605 required the reporting, for marketable order types, of: (1) the cumulative number of shares of covered orders (a) executed with price improvement, (b) executed at the quote, and (c) executed outside the quote; (2) for shares executed with price improvement, the share-weighted average amount per share that prices were improved; and (3) for shares executed outside the quote, the share-weighted average amount per share that prices were outside the quote.[692] Under these preexisting requirements, an order executed at a price better than the NBBO would have been an order executed with price improvement. The MDI Rules expanded the data that will be made available for dissemination within the national market system (''NMS data'') and included certain odd-lot information in NMS data.[693] While this odd-lot information will include pricing information for odd-lots priced inside the NBBO,[694] using the Rule 605's price improvement statistics prior to the amendments, there is no way for market participants to evaluate the performance of broker-dealers and market centers relative to such better-priced orders.

The Commission proposed to add a definition for ''best available displayed price,'' which would include the best priced odd-lot if that price is inside the NBBO and to provide additional price improvement statistics related to the best available displayed price.[695] Specifically, the Commission proposed to define ''best available displayed price'' as, with respect to an order to buy, the lower of (i) the national best offer at the time of order receipt or (ii) the price of the best odd-lot order to sell at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan; and, with respect to an order to sell, the higher of (i) the national best bid at the time of order receipt or (ii) the price of the best odd-lot order to buy at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan.[696] The Commission also proposed

[686] *See* Proposing Release, 88 FR 3786 at 3819 (Jan. 20, 2023); final 17 CFR 242.605(a)(1)(i)(E).

[687] Final 17 CFR 242.605(a)(1)(i)(F) (cumulative number of shares executed at any other venue).

[688] *See* Rule 605 Citadel Letter at 10.

[689] *See id.* (*citing* Proposing Release, 88 FR 3786 at 3819 (Jan. 20, 2023)).

[690] *Id.*

[691] *See* Proposing Release, 88 FR 3786 at 3819 (Jan. 20, 2023).

[692] *See* prior 17 CFR 242.605(a)(1)(ii)(B) through (I). ''Executed with price improvement'' means, for buy orders, execution at a price lower than the national best offer at the time of order receipt and, for sell orders, execution at a price higher than the national best bid at the time of order receipt. *See* final 17 CFR 242.600(b)(45). ''Executed at the quote'' means, for buy orders, execution at a price equal to the national best offer at the time of order receipt and, for sell orders, execution at a price equal to the national best bid at the time of order receipt. *See* final 17 CFR 242.600(b)(42). ''Executed outside the quote'' means, for buy orders, execution at a price higher than the national best offer at the time of order receipt and, for sell orders, execution at a price equal to the national best bid at the time of order receipt. *See* final 17 CFR 242.600(b)(44).

[693] *See* final 17 CFR 242.600(b)(69); MDI Adopting Release, 86 FR 18596 at 18613 (Apr. 9, 2021).

[694] ''Odd-lot information'' means (i) odd-lot transaction data disseminated pursuant to the effective national market system plan or plans required under 17 CFR 242.603(b) as of Apr. 9, 2021; and (ii) odd-lots at a price greater than or equal to the national best bid and less than or equal to the national best offer, aggregated at each price level at each national securities exchange and national securities association. *See* final 17 CFR 242.600(b)(69). Contemporaneously with the Proposing Release, the Commission separately proposed to, among other things, amend the definition of odd-lot information to include a new data element to identify the best odd-lot orders available in the market inside the NBBO, and accelerate the implementation of the round lot and the odd-lot information definitions. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80293–302 (Dec. 29, 2022).

[695] *See* Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023).

[696] *See* proposed Rule 600(b)(14); Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023). Because the best odd-lot order to buy or sell would be inside the NBBO, the national best bid or national best

to specify that, for beyond-the-midpoint limit orders, the best available displayed price shall be determined at the time such order becomes executable instead of the time of order receipt.[697]

The Commission further proposed to add two defined terms—''executed outside the best available displayed price'' and ''executed with price improvement relative to the best available displayed price''—to classify order executions based on their execution price relative to the best available displayed price.[698] Finally, the Commission proposed to require the reporting, for marketable order types, of (1) the cumulative number of shares of covered orders (a) executed with price improvement relative to the best available displayed price, (b) executed at the best available displayed price, and (c) executed outside the best available displayed price; (2) for shares executed with price improvement relative to the best available displayed price, the share-weighted average amount per share that prices were improved as compared to the best available displayed price; and (3) for shares executed outside the best available displayed price, the share-weighted average amount per share that prices were outside the best available displayed price.[699]

(2) Final Rule and Discussion

The Commission is adopting the definition of ''best available displayed price'' as proposed. Further, the Commission is requiring price improvement statistics relative to the best available displayed price, in addition to price improvement statistics relative to the NBBO, for marketable order types and midpoint-or-better order types as proposed.

An investor advocacy group agreed with the Commission that additional price improvement statistics specifically related to the best available displayed price would allow market participants to evaluate how well market centers and broker-dealers perform in executing covered orders relative to the best available displayed price.[700] In addition, an academic stated in support of the proposal that it ''is ludicrous to measure price improvement while ignoring visible odd lot liquidity'' and that price improvement should be measured relative to the effective best bid or offer for the dollar amount of the order.[701]

However, several commenters disagreed with the proposed price improvement statistics based on the best available displayed price because, according to these commenters, these statistics could be ''misleading.'' [702] An industry group stated that metrics that measure price improvement utilizing a comparison to the best odd-lot price would ''yield misleading information because it ignores the size of the order as compared to the size available at the odd-lot price.'' [703] A financial services firm suggested that the detailed report should exclude best available displayed price because this metric is only relevant in the commenter's view in a small number of occasions and would add ''misleading'' information to the report.[704] This commenter stated that while the Commission cited a recent academic working paper showing that odd-lots offer better prices than the NBBO 16–18% of the time, the percent of the time that the best available price differs from the NBBO will be smaller when the MDI Rule's new round lot definitions take effect.[705] According to this commenter, if the best available displayed price is relevant only for a small part of the time and absent context regarding how many shares are included in the price or how many shares the order was for, the best available displayed price metrics would ''border on meaningless and add unnecessary complexity to the report.'' [706]

Another broker-dealer suggested that the Commission reconsider the use of execution quality statistics with differing reference points would be ''confusing to retail investors.'' [707] This commenter also stated that using the best displayed odd-lot price as a reference point presents a number of difficulties or opportunities to be misleading because, for example, these quotes could ''be flickering quotes that are generally not accessible'' or for a ''size substantially smaller than the order size.'' [708] Another broker-dealer stated that measuring price improvement against odd-lot prices would ''yield unhelpful and misleading information'' because the size associated with odd-lot prices ''will vary greatly.'' [709] One commenter added that ''{c}ompilation of protected quotes is complicated. An odd-lot NBBO creates ambiguity.'' [710] An industry group and a financial services firm stated that any data related to the best available displayed price should not be included in the report format until the best odd-lot order to buy and best odd-lot order to sell have been included in the SIP.[711]

After consideration of the comments, the Commission is adopting the definition of ''best available displayed price'' and the addition of price improvement statistics based on this price for marketable order types and midpoint-or-better order types as proposed. As discussed in the Proposing Release, requiring price improvement statistics relative to the best available displayed price in the market, whether that is the NBBO or the best odd-lot order to buy or sell, will enhance the ability of market participants to evaluate the performance of market centers and broker-dealers.[712] The Commission continues to hold this view. Odd-lots often reflect pricing that is superior to the NBBO.[713] A recent academic working paper shows that odd-lots offer better prices than the NBBO 18% of the time for bids and 16% of the time for offers.[714] Although the round lot

offer would only be used if there is not a best odd-lot price on the same side of the market as the order. *See id.* at 3820, n.427.

[697] *See* proposed Rule 600(b)(14); Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023).

[698] *See* Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023). The Commission proposed to define ''executed outside the best available displayed price'' as, for buy orders, execution at a price higher than the best available displayed price; and, for sell orders, execution at a price lower than the best available displayed price. *See id.;* proposed Rule 600(b)(44). Similarly, the Commission proposed to define ''executed with price improvement relative to the best available displayed price'' as, for buy orders, execution at a price lower than the best available displayed price; and, for sell orders, execution at a price higher than the best available displayed price. *See* Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023); proposed Rule 600(b)(47).

[699] *See* Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023); proposed Rule 605(a)(1)(ii)(O) through (S).

[700] *See* Better Markets Letter at 8.

[701] *See* Angel Letter at 3.

[702] *See* SIFMA Letter II at 32; Schwab Letter III at 6; Robinhood Letter at 47; Rule 605 Citadel Letter at 6.

[703] SIFMA Letter II at 32.

[704] *See* Schwab Letter III at 6.

[705] *See* Schwab Letter II at 34; Schwab Letter III at 6. *See also* Proposing Release, 88 FR 3786 at 3821 (Jan. 20, 2023) (citing Bartlett et al. (2022)).

[706] *See* Schwab Letter II at 34; Schwab Letter III at 6.

[707] *See* Robinhood Letter at 47.

[708] *Id.* This commenter also stated that the best displayed odd-lot price might be a reasonable reference point for very small sized orders, such as fractional shares orders, but is not reasonable for any order of a round lot or greater. *See id.* at 47, n.115.

[709] *See* Rule 605 Citadel Letter at 6.

[710] Data Boiler Letter at 28.

[711] *See* Schwab Letter III at 6; FIF Letter at 33.

[712] *See* Proposing Release, 88 FR 3786 at 3820 (Jan. 20, 2023).

[713] *See* MDI Adopting Release, 86 FR 18596 at 18729 (Apr. 9, 2021) (describing analysis that found, among other things, that in May 2020, ''40% of {odd-lot} transactions (representing approximately 35% of all odd-lot volume) occurred at a price better than the NBBO'').

[714] *See* Bartlett et al. (2022). The authors found that this percentage increases monotonically in the stock price, for example, for bid prices, increasing

Continued

definition in the MDI Rules will result in fewer odd-lot orders in stocks with prices greater than $250, most stocks will not be affected by the new round lot definition.[715] In addition, a substantial amount of odd-lot transaction volume in stocks greater than $250 will not be included in the MDI round lot definition.[716] The changes in the MDI Rules may also result in a higher number of odd-lot trades, as the inclusion of odd-lot quotes that may be priced better than the current NBBO in consolidated market data may attract more trading interest from market participants that did not have access to this information prior to the MDI Rules.[717] Therefore, even though implementation of MDI Rules may result in changes to the number of odd-lot orders, price improvement statistics relative to the best available displayed price will continue to enhance the ability of market participants to evaluate order performance after implementation of the MDI Rules' round lot definition.

Under the MDI Rules, odd-lot information will include pricing information about odd-lots priced better than the NBBO and competing consolidators will be able to offer a product that contains information on the best priced odd-lot on each exchange.[718] Once this odd-lot information is available, reporting entities will be able to calculate the best available displayed price by using the information to identify the best-priced odd-lot order to buy (order to sell) available in the market and comparing it to the national best bid (offer). The MDI Rules have been approved but have not yet been implemented. As discussed further in section VII below, Rule 605's price improvement statistics that are relative to the best available displayed price will not be required to be reported until six months after odd-lot order information needed to calculate the best available displayed price is made available pursuant to an effective national market system plan.[719]

The Commission disagrees with commenters' concerns that price improvement statistics relative to the best available displayed price will be misleading or confusing.[720] The price improvement statistics relative to the NBBO contained in preexisting Rule 605 will still be available to market participants and other users of Rule 605 reports and therefore the price improvement statistics relative to the best available displayed price will be a supplement to, rather than a replacement for, price improvement statistics relative to the NBBO. While an odd-lot price that is better than the NBBO may not reflect sufficient quantity to execute certain orders, particularly larger-sized orders, the NBBO similarly may not reflect the best price at which certain orders can be filled using readily available liquidity. Statistics on price improvement relative to the best available displayed price will provide an additional data point for market participants to consider in the detailed Rule 605(a)(1) reports. Further, Rule 605's price improvement statistics will be presented within order size categories, including order size categories for orders of less than one share and odd-lot orders. Thus, to the extent that price improvement relative to the best available displayed price may be more informative for smaller-sized orders than larger-sized orders, the Rule 605 reports will present the price improvement statistics related to best available displayed price in a format that will make it possible to focus on those smaller-sized orders.

(h) Relative Fill Rate

(1) Proposed Approach

Prior to these amendments Rule 605 did not contain any execution quality metrics specific to non-marketable order types. Recognizing the need for more meaningful measures of execution quality for NMLOs and orders submitted with stop prices, the Commission proposed requiring additional information for executable NMLOs, executable stop orders, and beyond-the-midpoint limit orders. Specifically, the Commission proposed to require the reporting of the number of orders that received either a complete or partial fill.[721] The Commission also proposed to require the reporting of the cumulative number of shares executed regular way at prices that could have filled the order while the order was in force, as reported pursuant to an effective transaction reporting plan or effective national market system plan.[722] As proposed, the share count for each order would be capped at the order size.[723]

(2) Final Rule and Discussion

The Commission did not receive comment on the proposal to report the number of orders that received either a complete or partial fill. For the reasons discussed in the Proposing Release, the Commission is adopting Rule 605(a)(1)(iii)(A) as proposed, with one correction to the rule text.[724] Specifically, the Commission is adding the word ''covered'' to keep the language of Rule 605(a)(1)(iii)(A) consistent with other parts of Rule 605[725] as amended and avoid creating any ambiguity in the language of Rule 605.[726] The Commission also is adopting the relative fill rate metric as proposed, and, in response to comments received, is adopting an additional relative fill rate metric that measures only on-exchange executions.

With respect to the proposed metric based on the cumulative number of shares executed regular way at prices that could have filled the order while it was in force, an industry group stated that it would be fairer to measure a

from 5% for the group of lowest-price stocks in their sample, to 42% for the group of highest-priced stocks.

[715] *See* MDI Adopting Release, 86 FR 18596 at 18753, n.1960 (Apr. 9, 2021) and accompanying text (estimating ''approximately 98.5% of NMS stocks will have a round lot size of 100 shares'').

[716] *See id.* at 18753.

[717] *See id.* at 18754. *See also infra* notes 1032–1034 and accompanying text.

[718] *See* MDI Adopting Release, 86 FR 18596 at 18753 (Apr. 9, 2021).

[719] The Commission is still considering the proposed changes discussed in the Minimum Pricing Increments Proposing Release, which included proposals to accelerate the implementation of the round lot and odd-lot information definitions contained in the MDI Release and amend the definition of odd-lot information to include a new data element for the best available odd-lot orders available in the market. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80294–95 (Dec. 29, 2022). If, in the future, the Commission determined to adopt an amendment to the definition of odd-lot information to include a data element that identifies the best odd-lot orders available in the market, reporting entities would be required to use such information to determine the best available odd-lot price. However, when the MDI Rules are implemented, there will be sufficient odd-lot information for reporting entities to calculate the best available displayed price because odd-lot information will include better priced odd-lot orders.

[720] *See supra* notes 702–710 and accompanying text.

[721] *See* Proposing Release, 88 FR 3786 at 3821 (Jan. 20, 2023); proposed Rule 605(a)(1)(iii)(A).

[722] *See* Proposing Release, 88 FR 3786 at 3821 (Jan. 20, 2023); proposed Rule 605(a)(1)(iii)(B). Generally, ''regular way'' refers to bids, offers, and transactions that embody the standard terms and conditions of a market whereas a non-regular way transaction refers to one executed other than pursuant to standardized terms and conditions, such as a transaction that has extended settlement terms. *See, e.g.*, Regulation NMS Adopting Release, 70 FR 37496 at 37537, n.326 (June 29, 2005).

[723] *See* Proposing Release, 88 FR 3786 at 3821 (Jan. 20, 2023); proposed Rule 605(a)(1)(iii)(B).

[724] *See* Proposing Release, 88 FR 3786 at 3821 (Jan. 20, 2023).

[725] For example, final 17 CFR 242.605(a)(1)(i)(A) requires disclosure of the number of ''covered orders.''

[726] *See* final 17 CFR 242.605(a)(1)(iii)(A). Rule 605 as amended applies only to covered orders, so this does not represent a substantive change to Rule 605(a)(1)(iii)(A) as proposed. Final 17 CFR 242.605(a)(1) specifies that ''[e]very market center, broker, or dealer shall make available . . . : a report on the covered orders in NMS stocks that it received for execution.''

firm's execution rate against on-exchange executions because exchanges are fair-access venues, while ATS and dealer trades may not represent liquidity accessible to all market participants.[727] This commenter recommended that the Commission also require firms to report the cumulative number of shares executed ''regular way'' on any exchange at prices that could have filled the order while the order was in force.[728] Further, a broker-dealer stated that it may be useful to receive data on the number of shares that traded on all market centers for NMLOs as compared to an individual market center because being able to compare relative fill rates would potentially allow market participants to choose venues they perceive as being more likely to execute their NMLOs or assess if changes to the venues they route these orders to produce better fill rates.[729]

After consideration of the comments, the Commission is adopting the requirement for reporting of the cumulative number of shares executed regular way at prices that could have filled the order while the order was in force as proposed, for the reasons discussed in the Proposing Release.[730] In response to commenters' concerns about being able to compare the relative fill rate for orders executed on venues accessible to all market participants, the Commission is adopting an additional requirement for the reporting of the cumulative number of shares executed regular way on any national securities exchange at prices that could have filled the order while the order was in force, as reported pursuant to an effective transaction reporting plan or effective national market system plan.[731] Similar to the other relative fill rate metric that the Commission is adopting as proposed, for each order the share count will be capped at order size to prevent relatively small orders from skewing the metric.[732] The Commission agrees with commenters that the general metric that will measure the cumulative number of shares executed regular way anywhere in the market may include liquidity that was not accessible to the reporting firm.[733] Under the Exchange Act, national securities exchanges must provide fair access to displayed quotations.[734] Therefore, the additional metric concerning the relative fill rate on national securities exchanges will provide a comparative metric based on displayed quotations that all firms will have had the ability to access.

IV. Summary Execution Quality Report

Prior to the amendments, Rule 605 required market centers to produce detailed execution quality statistics and make this data available via large electronic data files, as required by the Rule 605 NMS Plan.[735] This detailed report was in machine-readable, rather than human-readable, format. The required format made the detailed report more suitable for further processing and analysis than for ready use by market participants and other interested parties. The Commission proposed in Rule 605(a)(2) that all market centers and larger broker-dealers required to produce the detailed report pursuant to Rule 605(a)(1) must also produce a summary execution quality report. After consideration of the comments, the Commission is adopting Rule 605(a)(2), with modifications from the proposal, as described further below.

A. Proposed Approach

Proposed Rule 605(a)(2) would have required every market center, broker, or dealer[736] to make publicly available for each calendar month a report providing summary statistics on all executions of covered orders that are market orders and marketable limit orders that it received for execution from any person.[737] The proposed summary report included a section for NMS stocks that are included in the S&P 500 Index as of the first day of the month and a section for other NMS stocks, and within each section, each symbol would have been equally weighted based on share volume.[738] The Commission proposed that each section of the report required by Rule 605(a)(2) contain the following summary statistics: (i) the average order size; (ii) the percentage of shares executed at the quote or better; (iii) the percentage of shares that received price improvement; (iv) the average percentage price improvement per order; (v) the average percentage effective spread; (vi) the average effective over quoted spread, expressed as a percentage; and (vii) the average execution speed, in milliseconds.[739]

The Commission proposed that the summary report be made available using the most recent version of the XML schema and the associated PDF renderer published on the Commission's website.[740] The proposed schema would have been a set of custom XML tags and XML restrictions designed by the Commission to reflect the disclosures in proposed Rule 605(a)(2).

B. Final Rule and Discussion

The Commission is adopting Rule 605(a)(2), with modifications from the proposal, to require that every market center, broker, or dealer produce a summary execution quality report in addition to the more detailed report required by Rule 605(a)(1).[741] The summary report will enable market participants and other interested parties to have ready access to focused aggregated data that will allow them to compare some of the more significant aspects of the execution quality provided by specific market centers and larger broker-dealers. Moreover, by requiring market centers, brokers, and dealers to produce a summary report in addition to, rather than instead of, the more voluminous data called for by Rule 605(a)(1), those market participants or other observers that would like to perform more comprehensive or specific analyses of execution quality remain able to download the more granular underlying data files and perform such analyses.

Several commenters supported the proposal to produce a summary report on the basis that investors would benefit from the greater access to execution quality data.[742] A financial services firm stated that although some broker-dealers voluntarily publish summary-level execution quality reports on their websites, ''these ad hoc disclosures are not universal, and, in any event, generally feature statistics brokers prefer to 'showcase' that may not reflect the

[727] *See* FIF Letter at 22. *See also* 17 CFR 242.610(a) and (b) (addressing means of access to quotations); 15 U.S.C. 78f(b)(2) and 15 U.S.C. 78o(b)(3) (providing for fair access to membership in SROs).

[728] *See* FIF Letter at 22.

[729] *See* Virtu Letter II at 12.

[730] *See* Proposing Release, 88 FR 3786 at 3821–22 (Jan. 20, 2023); final 17 CFR 242.605(a)(1)(iii)(B).

[731] *See* final 17 CFR 242.605(a)(1)(iii)(C).

[732] *See id.*

[733] *See supra* note 727 and accompanying text.

[734] *See* 15 U.S.C. 78f(b)(2), (4), (5), and (8). See also 17 CFR 242.610.

[735] *See* prior 17 CFR 242.605(a)(1) and (2); Rule 605 NMS Plan, at sections V and VI.

[736] As described in section II.A *supra,* a broker or dealer that is not a market center is not subject to the reporting requirements of Rule 605(a)(1) or (2) unless that broker or dealer introduces or carries 100,000 or more customer accounts through which transactions are effected for the purchase or sale of NMS stocks.

[737] *See* Proposing Release, 88 FR 3786 at 3823 (Jan. 20, 2023).

[738] *See id.*

[739] *See id.* at 3823–24.

[740] *See id.* at 3824; proposed Rule 605(a)(2). XML enables data to be defined, or ''tagged,'' using standard definitions. XML and PDF are ''open standards,'' which is a term that is generally applied to technological specifications that are widely available to the public, royalty-free, at no cost.

[741] *See* final 17 CFR 242.605(a)(2).

[742] *See, e.g.,* Beddo Letter; Genco Letter; Pritchard Letter; Macarthur Letter; Varghese Letter; letter from Ian Marshall (Mar. 6, 2023).

most meaningful measures of execution quality.'' [743] According to this commenter, the proposal would address this ''coverage gap'' by requiring larger broker-dealers to make Rule 605 disclosures and giving customers of these larger broker-dealers ''a direct line of sight into broker-dealer performance.'' [744] This commenter added that a ''standardized summary report will provide retail investors with a comprehensible overview of the thousands of rows and dozens of columns that appear on Rule 605 reports today.'' [745] Another financial services firm stated that a summary report ''will help investors more effectively evaluate competing broker offerings'' [746] and that compliance and technology costs associated with enhanced Rule 605 reporting ''are outweighed by the significant benefits to retail investors,'' including ''greater competition among firms to provide customers with strong execution quality.'' [747]

In contrast, other commenters, including broker-dealers, stated that a summary report could mislead investors, especially if the metrics required by Rule 605(a)(2) do not adequately account for differences in broker-dealer business models and customer bases.[748] One broker-dealer stated that using the summary report to compare execution quality across broker-dealers ''without normalizing for different order activity ignores differences in the flow of orders handled by these brokers and other aspects of the services that brokers provide or offer, including fees, interest rates, commissions, ease of use, customer service, accessibility, tools, and educational resources, and therefore could be potentially misleading to individual investors.'' [749] A financial services firm stated that the summary report ''needs additional descriptive statistics showing order flow attributes that can affect the comparability of execution quality statistics to enable a more accurate and useful measure of execution quality.'' [750] This commenter also stated that ''retail brokers have vastly different client bases reflected in vastly different order flow characteristics, which affects execution quality'' and ''[t]hese differences need to be reflected in the Summary Report so that the individual investor has sufficient data to make an educated assessment of execution quality performance between different brokers.'' [751] To address these concerns, this commenter suggested that the Commission add several metrics to the summary report ''to enable investors to accurately compare execution quality between different brokers''—specifically, average notional order size, percentage realized spread, and percentage quoted spread.[752]

The Commission acknowledges that differences in execution quality can be driven by differences between reporting entities other than differences in their skills at handling and/or executing orders, such as differences in the characteristics of their order flow. Any particular market center or broker-dealer's order flow may be made up of a different mixture of securities, order types, and order sizes, which may impact that market center or broker-dealer's execution quality statistics [753] The Commission recognizes that it is important to strike a balance between sufficient aggregation of orders to produce statistics that are meaningful and sufficient differentiation of orders to facilitate fair comparisons of execution quality across reporting entities. After reviewing the comments received, the Commission is modifying the calculation of several proposed metrics and is also adding several new metrics to the final summary report. For example, the Commission agrees with a commenter's suggestion [754] to add certain metrics—average notional order size, percentage realized spread, and percentage quoted spread—to the final summary report.[755]

Although a commenter suggested that the summary reports be ''normalized across brokers'' in order to reflect differences in order flow that may impact a broker's execution quality, including ''the difficulty of order flow the broker is handling,'' [756] the commenter did not explain how the summary reports should be normalized. The changes to the proposed summary report will provide more information about a broker-dealer's order flow characteristics than originally proposed [757] and will therefore enable users of the summary reports to better compare the execution quality metrics of broker-dealer firms with similar order flow characteristics and identify when different order flow characteristics may be contributing to differences in execution quality. Further, while the Rule 605(a)(2) summary report presents only one particular set of metrics related to execution quality, customers and other interested parties may also take into consideration other aspects of broker-dealer service, including but not limited to, fees, commissions, and educational resources, when comparing broker-dealers. In section IV.B.1.b) below the Commission discusses the specific execution quality statistics in detail.

Another broker-dealer stated that the detailed Rule 605 reports are often difficult for retail investors to analyze.[758] However, this commenter stated that the proposed solution—creating a high-level summary report—''could lead to retail investor confusion if the summary report does not adequately capture or explain the differences in order flow that are present across different market centers and broker-dealers.'' [759] This commenter stated that it may make sense for the Commission to first implement the revisions to Rule 605(a)(1) and evaluate the detailed reports before working with FINRA, retail brokers, and retail investors to determine how best to produce a summary report that contains ''digestible and accurate execution quality information.'' [760] The Commission does not agree with the commenter's approach. The Commission described the proposed summary report in detail in the Proposing Release, has considered comments related to the summary report, and is making changes in response to comments. The adopted summary report will improve the ability of investors and the public to view some of the more significant aspects of the execution quality provided by specific market centers and larger broker-dealers. Denying investors the opportunity to view a summary report

[743] Vanguard Letter at 4.

[744] *Id.*

[745] *Id.*

[746] Fidelity Letter at 8.

[747] *Id.*

[748] *See, e.g.,* SIFMA Letter II at 30; Virtu Letter II at 11; Rule 605 Citadel Letter at 5; Schwab Letter II at 30–31; Schwab Letter III at 2; Data Boiler Letter at 17–18; letter from Kelvin To, Founder and President, Data Boiler Technologies, LLC (Apr. 12, 2023) (''Data Boiler Letter II'') at 1.

[749] Virtu Letter II at 11. Another broker-dealer stated more generally that the Commission should account for ''retail client personas that vary considerably among broker-dealers,'' and these ''differences cause execution quality data to be difficult to compare on an apples-to-apples basis because, for example, trade and execution data generated from buy-and-hold investors' orders differs vastly from the same data generated from active traders' orders.'' Letter from Steven M. Greenbaum, Senior Vice President and General Counsel, TradeStation Securities, Inc. (Mar. 30, 2023) (''TradeStation Letter'') at 7.

[750] Schwab Letter III at 2.

[751] *Id.*

[752] *See id.* at 2–3.

[753] *See* Proposing Release, 88 FR 3786 at 3831 (Jan. 20, 2023).

[754] *See* Schwab Letter III at 2–3.

[755] *See infra* section IV.B.1.b) for additional discussion of these specific metrics.

[756] Virtu Letter II at 4.

[757] *See infra* note 833 and accompanying text.

[758] *See* Rule 605 Citadel Letter at 5.

[759] *Id.*

[760] *See id.*

until after the detailed reports are fully implemented would entail unnecessary delay of the benefits the summary report is designed to provide.

Finally, according to an individual investor, the information contained in the proposed summary report is not useful to investors, and ''[m]ost retail investors lack the knowledge and expertise to interpret these reports and use them to make informed trading decisions.'' [761] In contrast, an investor advocacy group states it ''does not agree with those who would argue that the proposed changes to disclosure of order execution will not benefit retail investors, who are unlikely to read the Rule 605 reports.'' [762] This commenter stated that ''even though a certain percentage of retail investors may not read the Rule 605 reports, they will still benefit indirectly as the enhanced disclosure will promote competition, improve regulatory oversight, and facilitate use by third-party researchers and academics, who in turn can extract information from the reports and use it to expose issues and problems with today's order routing and execution practices.'' [763] The Commission agrees with the investor advocacy group commenter and continues to view the summary report as a useful means to provide individual investors and other market participants with an overview of execution quality data. The summary report will aid investors by providing information in a more easily digestible format than the detailed Rule 605(a)(1) reports.

Moreover, the changes that the Commission is making to the summary report in response to commenters, including breaking out the statistics into notional size categories and adding average percentage realized and quoted spreads, will provide more information about the type of order flow received by the reporting entity. The increased amount of data required by final Rule 605(a)(2) will add some complexity to the adopted summary report as compared to the proposed summary report, however, based on such information, users of the report will be able to identify reporting entities with more comparable order flow and have greater context to understand the differences in execution quality statistics across market centers or broker-dealers with less comparable order flow.

The summary report contains a selection of execution quality metrics for interested parties to assess, rather than imposing a single metric that might require a subjective judgment or obscure meaningful differences in execution quality among broker-dealers or market centers. Despite being an abbreviated overview of the more detailed Rule 605(a)(1) report, as with the detailed report, independent analysts, consultants, broker-dealers, the financial press, and market centers likely will respond to the needs of investors by analyzing the disclosures and producing even more digestible information using data from the summary report, so that the broader public, including those that may not read the summary report, will benefit.[764] As with the Rule 605(a)(1) detailed report, if a market center or broker-dealer believes that the statistics do not fully reflect its order flow and execution practices, it is encouraged to make any additional information publicly available, outside of the summary report, that it believes will be helpful to investors and other market participants.[765]

1. Required Information

The Commission received comments discussing the calculation and utility of individual proposed statistics in the proposed summary report, along with comments recommending the addition of new statistics or requesting clarification or confirmation of how proposed statistics should be calculated, as described further below.[766]

After review of the comments, the Commission is adopting the statistics in Rule 605(a)(2) largely as proposed, with modifications to the computation of certain statistics. The Commission is also adding new execution quality statistics to the summary report.[767] For the reasons described in section IV.B.1.a) below, the Commission is not requiring that the summary report be equally weighted by symbol based on share volume. Section IV.B.1.b) below discusses each of the execution quality statistics in the summary report, including, where appropriate, how these statistics will be weighted. As described in section IV.B.1.b), the summary report will divide each of market and marketable limit orders into separate categories based on eight notional order size buckets plus an aggregated category for all orders with a notional value of less than $200,000.

The Commission agrees with one industry group that stated it is ''important to ensure that the summary report provides the necessary information to allow for a fair comparison across reporting firms.'' [768] The final summary report will provide statistics that are relevant to evaluating what type of pricing orders received, how quickly orders were executed, and what type of order flow the market center or broker-dealer received. As discussed further in section IV.B.1.b) below, the Commission is including several execution quality statistics beyond those included in the proposal to help ensure that the summary report provides sufficient information for a meaningful comparison across firms.

Some commenters stated that any statistic included in the summary report or necessary to calculate a statistic in the summary report should also be included in the Rule 605(a)(1) report, so that the statistics in the summary report may be derived from the detailed Rule 605(a)(1) report.[769] The Commission agrees and, as discussed further below, is making conforming changes so that the Rule 605(a)(1) detailed report will contain all information necessary to be able to reconstruct the Rule 605(a)(2) summary report. In addition, market participants will be able to use the data contained in the Rule 605(a)(1) reports to create their own summary-level report with any adjustments that they find useful for comparison with and evaluation of a reporting entity's published summary report.

A broker-dealer suggested that the summary report may be more informative if it differentiated between retail investors and professional customers because the nature of each order flow is different and segmentation would allow retail investors to obtain execution quality statistics for similar types of orders.[770] A financial services firm stated that the Commission ''should distinguish Rule 605 data by [s]egmented [o]rder and non-[s]egmented [o]rder flow and display this information separately in both the

[761] Gillmore Letter.

[762] Better Market Letter at 9.

[763] *Id.* at 9–10.

[764] *See* Proposing Release, 88 FR 3786 at 3796 (Jan. 20, 2023); Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75419 (Dec. 1, 2000).

[765] Any such statements will be subject to applicable securities laws and regulations.

[766] *See, e.g.,* Rule 605 Citadel Letter; FIF Letter; Schwab Letter II.

[767] The Commission is including in the summary report the following metrics that were not in the Proposing Release's rule text: (i) average notional order size; (ii) for executions of covered orders, the average midpoint; (iii) for executions of covered order, the average percentage quoted spread; (iv) for executions of covered orders, the average percentage realized spread as calculated 15 seconds after the time of execution; and (v) for executions of covered orders, the average percentage realized spread as calculated 1 minute after the time of execution. These metrics are discussed in greater detail *infra* at section IV.B.1.b).

[768] FIF Letter at 22.

[769] *See id.* at 29; FIF Letter II at 9; FIF Letter III at 3; Schwab Letter II at 32; Schwab Letter III at 4.

[770] *See* Rule 605 Citadel Letter at 8.

detailed Rule 605 reports and the proposed Summary Reports.'' [771] The Commission has decided not to revise the summary report to divide the report between retail investors and professionals or between segmented and non-segmented orders, as suggested by the commenters, for the same reasons that the Commission is not making corresponding changes to the reports required by Rule 605(a)(1).[772]

Another commenter argued that the summary report should limit the orders in the report to those with a notional value of less than $200,000.[773] This commenter argued that the Commission in its economic analysis of the Order Competition Rule Proposing Release [774] and the Proposing Release [775] had limited the scope of retail order flow to orders of less than $200,000, to ''normalize order flow variables for analysis in order to meaningfully compare broker-dealers' execution quality.'' [776] The commenter stated its belief that the summary report should likewise limit the report to orders of a notional value less than $200,000, ''which is a natural breakpoint between size categories.'' [777] In response to this commenter's suggestion, as described in more detail in section IV.B.1.b) below, while the Commission is not establishing such a limit for the summary report as a whole, the Commission is adding execution quality information as divided by notional order size buckets, along with a row of execution quality information that aggregates all orders in a particular category, excluding orders with a notional value of $200,000 or more. This aggregated information will provide users of the summary report a means to compare among market centers' or broker-dealers' execution quality for orders less than $200,000.

(a) Weighting Method

The Commission proposed that within each section of the summary report, each symbol would have been equally weighted based on share volume. The Commission stated in the Proposing Release that equal weighting of each symbol would facilitate the comparability of execution quality statistics among market centers or broker-dealers that receive for execution different mixes of stocks and prevent the nature of the stocks traded from making it more difficult to determine how the reporting entity performed with respect to execution quality for the particular mix of orders that it received for execution.[778]

One industry group, however, stated that the summary report statistics should not be equally weighted by symbol based on share volume because this approach would result in misleading data being provided to customers.[779] This commenter agreed with the Commission that the mix of symbols traded by a firm could impact its reported execution quality statistics, but was concerned that symbol-based weighting would create distortions that ''would significantly outweigh any potential benefits.'' [780] The commenter recommended as an alternative that the Commission require each market center and broker-dealer producing a summary report to include its weighted average execution price as a separate reportable item on the summary report.[781] The commenter stated that its recommended approach would avoid the ''misleading data that would result from symbol-based weighting'' and ''customers can take a broker's weighted average execution price into account when reviewing the summary report data.'' [782] This commenter further recommended that the same approach be used for weighting within and across symbols and, as described further below, that the Commission require the use of spread-based weighting for E/Q and share-based weighting for certain other statistics.[783]

After considering the comments, the Commission is not requiring that the summary report be equally weighted by symbol based on share volume as proposed.[784] The Commission is persuaded that symbol-based weighting could cause distortions in cases where a reporting entity receives a significantly different volume of orders in one symbol as compared to another symbol,[785] and these distortions potentially might not justify any potential benefit of utilizing this weighting method. As discussed further below, the Commission is not adding the share-weighted notional average execution price to the summary report as recommended by the commenter,[786] but the Commission is adding average midpoint for order executions. Similar to the commenter's recommendation, this metric will provide information about whether a reporting entity's order flow was more heavily weighted towards lower-priced stocks or higher-priced stocks. The summary report statistics will also utilize share-based weighting, instead of equally weighting by symbol based on share volume, except as discussed specifically below.

(b) Statistics Included

The summary report required by final Rule 605(a)(2) includes sections for NMS stocks in the S&P 500 Index and for all other NMS stocks. Within each section, the final rule requires that the summary report divide market and marketable limit orders into categories based on eight notional order size buckets and an aggregated bucket for orders with a notional value less than $200,000 (as described below). The Commission is requiring that the summary report include the following statistics as proposed, as described below: (i) percentage of shares executed at the quote or better; (ii) percentage of shares that received price improvement; (iii) average percentage effective spread; and (iv) average execution speed, in milliseconds. The Commission is also requiring that the summary report include the following statistics with modifications from the proposal, as described below: (i) average order size in shares; (ii) share-weighted average percentage price improvement; and (iii) average effective spread divided by the average quoted spread, expressed as a percentage. Finally, the Commission is requiring that the summary report include the following additional statistics that were not part of the

[771] Fidelity Letter at 9.

[772] *See supra* notes 172–174 and accompanying text; note 194 and accompanying text.

[773] *See* Schwab Letter III at 4.

[774] *See* Order Competition Rule Proposing Release, 88 FR 128 at 199 (Jan. 3, 2023) (Table 15—Regression Analysis Showing Relationship Between Execution Quality and PFOF in NMS Common Stocks and ETFs).

[775] *See* Proposing Release, 88 FR 3786 at 3839 (Jan. 20, 2023) (Table 3—Average Wholesaler Execution Quality Received by Retail Broker Quintiles, January-March 2022).

[776] Schwab Letter III at 4.

[777] *Id.*

[778] *See* Proposing Release, 88 FR 3786 at 3823 (Jan. 20, 2023).

[779] *See* FIF Letter at 25–26, 28. This commenter stated that one interpretation of ''equal weighting by symbol based on share volume'' is to use share-based weighting within each symbol and then symbol-based weighting across symbols, but requested clarification. *See id.* at 25. The Commission confirms that this explanation is consistent with the weighting method as proposed.

[780] *See id.* at 27.

[781] *See id.* The commenter stated that weighted average execution price would be computed as follows: first, for each individual execution, multiply the number of shares executed by the execution price; next, sum the results; and last, divide the result by the total number of shares executed. *See id.*

[782] *Id.*

[783] *See id.* at 23, 27, 28–32.

[784] *See supra* section III.B.4.d for a more detailed discussion of comments with respect to weighting of statistics in the detailed reports required under Rule 605(a)(1).

[785] *See* FIF Letter at 25–26 (providing a comparison between two hypothetical firms of average effective over quoted spread with symbol-based weighting).

[786] *See supra* note 781 and accompanying text.

proposal, as described below: (i) average notional order size; (ii) average midpoint; (iii) average percentage quoted spread; (iv) average percentage realized spread as calculated 15 seconds after the time of execution; and (v) average percentage realized spread as calculated 1 minute after the time of execution.

Average order size. The Commission proposed to include in the summary report a metric for average order size.[787] As described below, the Commission is adopting this metric largely as proposed and adding a break-out of execution quality metrics by notional size bucket and an additional order size metric in response to comments.

One industry group recommended that ''average order size in shares for the summary report be calculated (for the covered orders that must be reported in the summary report) by dividing the aggregate number of shares of covered orders by the number of orders.'' [788] This commenter further recommended adding ''average order size in notional value'' to the summary report, which ''can be calculated by a reporting firm (for the covered orders that must be reported in the summary report) by dividing the aggregate notional value of covered orders by the number of orders.'' [789] A couple of financial services firms also recommended presenting order-size categories in the summary report by average notional order size instead of lot size.[790] One of these commenters stated that order notional sizes provide investors a clearer view of the execution experience associated with their order, are more easily compared over time, are more representative of the cost to implement different types of trades, and are more consistent with increased market use of fractional/notional trading.[791] Similarly, the other commenter stated its belief that including ''average notional order size'' [792] in the summary report alongside average order size in shares would allow a user of the summary report to calculate another metric, ''average price per share,'' by dividing ''average notional order size'' by ''average share order size.'' [793]

After reviewing the comments, the Commission is retaining the ''average order size'' metric in the summary report largely as proposed with a modification to state that average order size will be reported in number of shares because the proposed rule was ambiguous about whether average order size would have been measured in number of shares or notional value.[794] The average order size in shares is relevant to understanding the relative size of the orders that the reporting market center, broker, or dealer received for execution.

However, the Commission also agrees with commenters that the average order size in notional value is relevant to understanding relative order size. For example, one broker-dealer stated that certain orders may be harder to execute, ''for example, when market liquidity is scarce or when the customers have difficult (*e.g.,* large-sized) orders to execute.'' [795] The Commission agrees with commenters that differences in a firm's execution quality metrics may correspond to differences in order flow. In particular, smaller orders may receive different execution quality than larger orders because, among other things, available liquidity in a particular security at a particular price is more likely to be sufficient to fill a smaller order. Therefore, the Commission is modifying the proposed summary report to: (1) add a metric for average notional order size; [796] and (2) require categorization of the data by notional order size.[797] Dividing execution quality statistics in the summary reports according to notional order size buckets provides investors with a more nuanced means to differentiate between firms and allows for comparison of execution quality statistics for more similar orders. Moreover, the average notional order size metric provides important context for where a firm's orders tend to fall within the range of a particular notional order size bucket.

With respect to the categorization of the data by notional order size, the statistical information in the summary reports for market orders and marketable limit orders is divided into eight notional order size ranges: less than $250; $250 to less than $1,000; $1,000 to less than $5,000; $5,000 to less than $10,000; $10,000 to less than $20,000; $20,000 to less than $50,000; $50,000 to less than $200,000; and $200,000 or more. These notional order size ranges correspond with the notional order size ranges that are used in the detailed reports required pursuant to Rule 605(a)(1).[798] As discussed in section III.B.1.b) above, the Commission selected these notional order size ranges based on its analysis of CAT data and comments received. Moreover, using the same notional order size ranges for the detailed reports and summary reports allows the statistics in the summary reports to be derived from the detailed reports as suggested by commenters.

As an additional measure of categorization by notional order size, the summary report also includes overall statistics for non-block size market and marketable limit orders—*i.e.,* the statistics in this row are not divided by notional order size range but only include orders smaller than $200,000 in notional value. Capping these overall statistics at $200,000 will prevent extremely large, block size orders from skewing the averages. It will also provide an accessible snapshot of information for investors. Providing overall execution quality statistics will balance providing more detailed execution quality data to market participants with providing an overview of a market center's or broker-dealer's execution quality in a more readily digestible form for investors, other market participants, or interested parties.

Finally, because average order size in both shares and notional value are the average order size received rather than executed, the Commission is modifying the first sentence of Rule 605(a)(2) to remove the words ''executions of'' in the clause referring to summary report ''providing summary statistics on all *executions of* covered orders that are

[787] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2)(i).

[788] FIF Letter II at 11.

[789] *Id.* This commenter also stated that notional value should be obtained by multiplying the number of shares by the midpoint at the time of order receipt. *See id.*

[790] *See* Fidelity Letter at 9; Schwab Letter III at 3.

[791] *See* Fidelity Letter at 9.

[792] This commenter would calculate ''average notional order size'' by multiplying the number of shares by the midpoint at the time of order entry. *See* Schwab Letter III at 3.

[793] *See id.*

[794] *See* final 17 CFR 242.605(a)(2)(i).

[795] Virtu Letter II at 11.

[796] *See* final 17 CFR 242.605(a)(2)(ii). An industry group recommended that average order size in notional value be calculated ''by dividing the aggregate notional value of covered orders by the number of orders.'' FIF Letter II at 11. Average order size in notional value will be calculated as the cumulative notional value of covered orders divided by the total number of orders, as recommended by the commenter. As discussed above, the Commission is adopting a requirement that the detailed reports required by Rule 605(a)(1) include a cumulative notional value of covered orders metric so that average order size in notional value can be calculated from the summary report. *See supra* notes 376–378 and accompanying text.

[797] *See* final 17 CFR 242.605(a)(2).

[798] *See supra* section III.B.1.b). The Commission is not adopting commenters' suggestion that the notional value of an order should be based on the midpoint. *See supra* notes 789, 792. Instead, the notional value of a market or limit order will be calculated in the same manner for the summary report as it is for the detailed report. *See supra* note 361 and accompanying text.

market and marketable limit orders.'' [799] Instead, to avoid any ambiguity about how each of the statistics are calculated, the Commission is specifying where individual data elements apply to executions of covered orders, as described below.[800]

Percentage of shares executed at the quote or better and percentage of shares that received price improvement. The Commission proposed to include in the summary report metrics for the percentage of shares executed at the quote or better and percentage of shares that received price improvement and is adopting these metrics as proposed.[801] One industry group stated that there is no need to reference ''equal weighting by share volume,'' or any other weighting methodology with respect to the ''percentage of shares executed at the quote or better'' or ''percentage of shares that received price improvement'' metrics, because the weighting is clearly understood from the data element itself.[802] The Commission agrees that these metrics are weighted based on the number of shares executed and that reporting entities will understand this based on the metric as proposed. The Commission is adopting these statistics as proposed, while clarifying in the rule text that the statistics apply to executions of covered orders. These statistics will provide useful information for evaluating what type of pricing orders received.

Share-weighted average percentage price improvement. The Commission proposed to include a metric in the summary report for share-weighted average percentage price improvement per order.[803] As described below, the Commission is adopting this metric largely as proposed and adding a related metric to the detailed report. One industry group stated that it will assume that the proposed metric ''average percentage price improvement per order'' is intended to report price improvement as a percentage of the midpoint (as of the time of order receipt) and further recommended that average price improvement be share-weighted.[804] In addition, for clarity, this commenter recommended that the metric be labeled as ''share-weighted average percentage price improvement'' and the words ''per order'' be removed from the text of proposed Rule 605(a)(2)(iv).[805]

Average percentage price improvement will be measured as a percentage of the midpoint of the national best bid and national best offer at the time of order receipt.[806] In other words, average percentage price improvement is the share-weighted average price improvement for orders executed divided by the share-weighted average midpoint at the time of order receipt for those orders. The Commission agrees with the commenter that further clarity in this regard would be useful. Therefore the Commission is renaming this metric from the proposal to refer to the ''share-weighted average percentage price improvement,'' as suggested by the commenter, so that the use of share-based weighting is explicit, clarifying in the rule text that the share-weighted average percentage price improvement applies to executions of covered orders, and specifying that this statistic is calculated as the cumulative amount that prices were improved less the cumulative amount that prices were executed outside the quote divided by sum of the average midpoint times the number of shares executed.[807] In addition, as suggested by the commenter,[808] the Commission is requiring that the Rule 605(a)(1) detailed report include an additional column setting forth the average midpoint for executions of covered orders.[809] The new defined term for ''average midpoint'' refers to the share-weighted average of the midpoint of the NBB or NBO at the time of order receipt (or, for non-marketable limit orders, beyond-the midpoint limit orders, and orders submitted with stop prices, at the time such orders first become executable).[810] The inclusion of average midpoint for executions of covered orders in the Rule 605(a)(1) detailed report will enable users to derive the share-weighted average percentage price improvement.[811]

Average percentage effective spread. The Commission proposed to include in the summary report a metric for the average percentage effective spread.[812] The Commission is adopting the metric largely as proposed. One industry group stated in connection with the summary report that it agrees with the approach proposed by the Commission for calculating average percentage effective spread.[813] As discussed above, the Commission is modifying the definition of ''average percentage effective spread'' from the definition of such term in the proposal to make use of other defined terms.[814] Although the adopted metric in the summary report utilizes the new definition of ''average percentage effective spread,'' the metric itself is unchanged and the Commission is clarifying in the rule text that the metric applies to executions of covered orders.[815]

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[799] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2).

[800] *See* final 17 CFR 242.605(a)(2).

[801] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2)(ii) and (iii); final 17 CFR 242.605(a)(2)(iv) and (v).

[802] *See* FIF Letter at 31. This commenter stated that ''percentage of shares executed at the quote or better'' would be calculated by dividing the total shares executed at the quote or better by the total shares executed, and ''percentage of shares that received price improvement'' would be calculated by dividing the total number of shares executed with price improvement by the total number of shares executed. *See id.*

[803] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2)(iv).

[804] *See* FIF Letter at 28–29. *See also* FIF Letter III at 3 (''FIF members understand ['share weighted average percentage price improvement'] to mean the share-weighted price improvement divided by the share-weighted midpoint.'').

[805] *See* FIF Letter at 29. This commenter also recommended that the Commission add a column to the detailed Rule 605(a)(1) report that would provide the share-weighted average midpoint for each row, so that the market center or broker-dealer could derive the denominator for the share-weighted average percentage price improvement calculation. *See id. See also* FIF Letter II at 10; FIF Letter III at 3.

[806] *See* final 17 CFR 242.605(a)(2)(vi).

[807] *See* final 17 CFR 242.605(a)(2)(vi) and final 17 CFR 242.600(b)(9) (defining average midpoint). The cumulative amount that prices were improved is derivable from the Rule 605(a)(1) reports by multiplying, for each row, the cumulative number of shares of covered orders executed with price improvement (required by Rule 605(a)(1)(ii)(E)) by the share-weighted average amount per share that prices were improved (required by Rule 605(a)(1)(ii)(F)). Similarly, the cumulative amount that prices were executed outside the quote is derivable by multiplying, for each row, the cumulative number of shares of covered orders executed outside the quote (required by Rule 605(a)(1)(ii)(J)) by the share-weighted average amount per share that prices were outside the quote (required by Rule 605(a)(1)(ii)(K)). The numerator will be the total cumulative price improvement for every included row, less the total cumulative amount the prices were executed outside the quote for every included row. The denominator is derivable from the Rule 605(a)(1) reports by multiplying, for each row, the total number of shares executed (*i.e.,* the sum of the share counts required by Rule 605(a)(1)(i)(E) and (F)) by the average midpoint (required by Rule 605(a)(1)(i)(Y)). The denominator will be the sum of the total for every included row.

[808] *See supra* note 805.

[809] *See supra* note 591 and accompanying text.

[810] *See* final 17 CFR 242.600(b)(9). The average midpoint for order executions represents the same calculation as the denominator for the percentage-based spread statistics as proposed. *See supra* notes 588–591 and accompanying text.

[811] *See* final 17 CFR 242.605(a)(1)(i)(Y).

[812] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2)(v).

[813] *See* FIF Letter at 29. The commenter also recommended that for clarity the metric be retitled as ''share-weighted average percentage effective spread.'' *See id.* The Commission disagrees with the commenter that this additional language is needed because the adopted definition of ''average percentage effective spread'' includes the use of share-weighting. *See* final 17 CFR 242.600(b)(10).

[814] *See supra* section III.B.4.b)(2). The ''average percentage effective spread'' is calculated as the average effective spread for order executions divided by the average midpoint for order executions. *See* final 17 CFR 242.600(b)(10).

[815] *See* final 17 CFR 242.605(a)(2)(vii). As discussed above, the Commission is adding a statistic for average midpoint for order executions

Average effective spread divided by average quoted spread (E/Q). The Commission proposed to include a metric in the summary report for average effective spread over average quoted spread, expressed as a percentage.[816] As discussed below, the Commission is adopting this metric largely as proposed and adding a metric for average quoted spread. As discussed above, several commenters stated that the Commission should require firms to calculate average E/Q utilizing spread-based, rather than share-based, weighting.[817] One industry group recommended that the summary report include the share-weighted average percentage quoted spread, in addition to the share-weighted average effective spread.[818] This commenter stated that with these statistics any person could derive effective over quoted spread and so it would not be necessary to include E/Q in the summary report.[819] A financial services firm also suggested that the summary report include ''percentage quoted spread,'' to be calculated by dividing the quoted spread by the midpoint of the NBB and NBO at the time of order entry.[820] This commenter stated that ''[i]n addition to providing transparency into the mix of each broker's order flow, including this metric will allow users to confirm the E/Q calculation on the Summary Report by dividing Percentage Effective Spread by Percentage Quoted Spread.'' [821] This commenter also suggested that the summary report show effective spread and quoted spread and then allow individuals to compute their own E/Q from those two numbers.[822]

After reviewing the comments, the Commission is: (1) adopting average E/Q as a metric on the summary report largely as proposed, while adjusting the weighting methodology from share-based weighting to spread-based weighting as suggested by commenters; [823] and (2) adding average percentage quoted spread as a metric in the summary report, also as suggested by commenters.[824] The Commission is also stating in the rule text for clarity that these metrics apply to executions of covered orders.[825] As discussed above, requiring spread-based weighting for the E/Q statistics will provide a consistent measure of E/Q that will not vary based on the specific symbols to which price improvement is allocated and thereby will facilitate the comparability of price improvement statistics.[826] Further, even though market participants and other interested parties could calculate E/Q on their own if the summary report includes average effective spread and average quoted spread, there is additional utility in having the average E/Q readily accessible on the summary report, particularly because market participants often use E/Q as a measure of execution quality.[827] The inclusion of average quoted spread on the summary report will provide another metric that users of the summary report may use to understand the nature of the reporting firm's order flow.

Average execution speed in milliseconds. The Commission proposed to include a metric in the summary report for average execution speed in milliseconds and is adopting this metric largely as proposed.[828] An industry group stated its understanding that the calculation of ''average execution speed in milliseconds'' would proceed as follows: first, for each individual execution multiply the shares executed by the time to execution; second, sum the results; and finally, divide that sum by the total shares executed.[829] The Commission confirms that reporting entities will calculate the metric as stated by the commenter and to add clarity to the rule text is specifying that this metric applies to executions of covered orders and is a share-weighted average.[830] The proposed metric is relevant to evaluating how quickly orders were executed, and the Commission therefore has decided to adopt the metric as proposed.[831]

Additional statistics in the summary report. In the Proposing Release, the Commission solicited comment on whether any additional execution quality statistics required under proposed Rule 605(a)(1) should be included as an aggregated statistic in the summary report.[832] As described below, in consideration of these comments, the Commission is adding to the summary report metrics for average realized spread as calculated at 15 seconds and 1 minute from time of execution, and a metric for the average midpoint.

An industry group stated that order flow characteristics such as the amount of ''informed'' order flow received by a broker-dealer and the size of an order relative to the average daily volume of a stock are factors outside of the control of order-handling parties but can impact the amount of price improvement received.[833] This commenter further stated that the impact of these order flow characteristics could be measured in part through statistics such as realized spread and price impact and thus recommended that the Commission require firms to include in the summary report the weighted-average realized spread at 15 seconds and at 1 minute after the time of execution.[834] A financial services firm also suggested that percentage realized spread be included in the summary report statistics and argued that this ''simple addition would provide better transparency regarding the distinct

to the detailed report so that the percentage-based spread statistics in the summary report can be derived from the detailed report. *See supra* notes 588–591 and accompanying text.

[816] *See* Proposing Release, 88 FR 3786 at 3823–24 (Jan. 20, 2023); proposed Rule 605(a)(2)(vi).

[817] *See supra* notes 600–608 and accompanying text.

[818] *See* FIF Letter at 29.

[819] *See id.* This commenter stated that if average percentage effective spread and quoted spread are reported then a person could derive the average percentage price improvement for the summary report. *See id.*

[820] *See* Schwab Letter III at 3.

[821] *Id.*

[822] *See* Schwab Letter II at 31.

[823] To implement the change in weighting methodology, the Commission is modifying the description of the average E/Q metric to specify that it is average effective spread *divided by* average quoted spread. As is the case with the average E/Q statistics in the detailed report required by Rule 605(a)(1), this description of the average E/Q statistic for the summary report makes use of adopted defined terms for ''average effective spread'' and ''average quoted spread.'' *See supra* notes 613–615 and accompanying text. *See also* final 17 CFR 242.605(a)(2)(ix); final 17 CFR 242.600(b)(8); final 17 CFR 242.600(b)(12). In contrast, the Commission proposed to utilize a defined term for ''average effective over quoted spread,'' which would have required the calculation of the E/Q for each transaction that would have then been averaged over a month, as weighted by number of shares. *See* Proposing Release, 88 FR 3786 at 3817 (Jan. 20, 2023).

[824] *See* final 17 CFR 242.605(a)(2)(viii) (requiring that average percentage quoted spread be included as a metric in the summary report and providing that average percentage quoted spread means the average quoted spread for order executions divided by the average midpoint for order executions).

[825] *See* final 17 CFR 242.605(a)(2)(viii) and (ix).

[826] *See supra* notes 617–620 and accompanying text.

[827] *See* Proposing Release, 88 FR 3786 at 3970 (Jan. 20, 2023).

[828] *See id.* at 3823–24; proposed Rule 605(a)(2)(vii); final 17 CFR 242.605(a)(2)(xii).

[829] *See* FIF Letter at 31.

[830] The time-to-execution statistics in the detailed report required by Rule 605(a)(1) similarly utilize a share-weighted average. *See* final 17 CFR 242.605(a)(1)(ii)(G), (I), (L); final 17 CFR 242.605(a)(1)(iii)(D).

[831] A broker-dealer suggested that the Commission should only require execution-time statistics for market orders because marketable limit orders may be partly executed or may exceed the consolidated quote size. *See* Rule 605 Citadel Letter at 10. The summary report will include average execution speed for market and marketable limit orders. The Commission is retaining average execution speed for marketable limit orders in the summary report for the same reasons that the Commission is retaining execution-time statistics for marketable limit orders in the detailed report required by Rule 605(a)(1). *See supra* section III.B.3.b.

[832] *See* Proposing Release, 88 FR 3786 at 3825. (Jan. 20, 2023).

[833] *See* FIF Letter at 31.

[834] *See id.* at 32.

characteristics of order flow among brokers which, in turn, affects the average execution quality metrics on the reports.'' [835] Both commenters stated that a person reviewing the summary report could calculate the price impact based on the realized spread and the effective spread.[836]

The Commission agrees with the commenters that viewing the average realized spread in the summary report will be useful to investors. The average realized spread metrics for 15 seconds and 1 minute after the time of execution were proposed for inclusion in the detailed report required pursuant to Rule 605(a)(1) and will similarly allow users of the summary report to differentiate between various types of order flow.[837] Moreover, because the final Rule 605(a)(1) detailed report requires the calculation of average realized spread at multiple time horizons, including 15 seconds and 1 minute, adding these two time horizons for average realized spread to the summary report should impose a minimum burden on reporting entities. Therefore, the Commission is requiring that the summary report include, for executions of covered orders, both the average percentage realized spread as calculated 15 seconds after the time of execution and the average percentage realized spread as calculated 1 minute after the time of execution.[838]

An industry group further suggested adding share-weighted average execution price as a metric to the summary report.[839] Although the Commission agrees with the commenter that the share-weighted average execution price could provide useful information, average execution price is not a metric included in the detailed report required by Rule 605(a)(1) and therefore if this statistic were included in the summary report it would not be derivable from the detailed report, contrary to commenters' suggestions that the metrics in the summary report should be derivable. Therefore, the Commission is adding to the summary report a metric for average midpoint for executions of covered orders because this metric will be included in the detailed report so that other summary report statistics will be derivable from the detailed report and, similar to share-weighted average execution price, average midpoint provides information about the mix of stocks represented in the reported statistics.[840] Thus, the inclusion of the average midpoint will provide those using the summary report for comparison purposes with a means to assess whether differences in the price mix of stocks could be a factor affecting other execution quality statistics of reporting entities.

2. Required Format

As discussed below, commenters supported the production of the summary report in a human-readable format. A financial services firm supported the proposal to require a standardized summary report in a ''user-friendly format.'' [841] A national securities exchange stated that the proposed format would make the data in the summary reports accessible to a wider audience in a standard format to facilitate comparisons.[842] However, one academic believed that while the proposed summary reports ''are most important,'' the Commission's proposal ''did not clearly display what the summary reports would look like.'' [843] Finally, one industry group recommended that CSV,[844] or another format that could be copied into a spreadsheet software program, be used in place of XML for the summary report. According to the commenter, using CSV ''would allow investors to compare summary data across firms more readily.'' [845]

After review of the comments, the Commission is requiring the use of PDF format as proposed and modifying proposed Rule 605(a)(2) to require that market centers and broker-dealers also produce the summary report in CSV format instead of XML format as suggested by the commenter.[846] Making the summary report available in these file formats will allow market centers and broker-dealers to efficiently prepare the summary reports. In addition, investors and other members of the public will benefit from being able to access the summary report in multiple formats. Presently, it is challenging for individual investors to decipher and analyze the detailed Rule 605(a)(1) report. These individual investors will be more readily able to use a summary report to make a more informed choice about selection of a broker-dealer than they can now. Because the summary report is human-readable in PDF format, individual investors will be able to assess the data by reviewing and comparing summary reports without needing technical expertise or relying on an intermediary. Further, independent analysts, consultants, and the financial press may also analyze the summary reports to provide more information to individual investors, including those who do not themselves access the summary reports.

The Commission further agrees with the industry group commenter that investors will benefit from the summary report being provided in CSV format and has modified proposed Rule 605(a)(2) to require that the summary report required therein be provided in CSV format, instead of XML, and also provided using the associated PDF renderer. As would have been the case using XML, the requirement to use the Commission's schema for CSV format will result in the summary report data being provided in a format that is structured and machine-readable, which allows users to more easily process and analyze the data, and provides consistency of format across reports. Requiring a CSV file format also provides market participants and other interested parties with a simple and versatile format that is viewable in many programs. Like XML (and PDF), CSV is ''open standard,'' which is a term that is generally applied to technological specifications that are widely available to the public, royalty-free, at no cost. However, the Commission agrees with the commenter that a CSV file format may allow investors and other members of the public to compare summary data across firms more readily than XML. Investors and other members of the public may find a CSV file format preferable to an XML file format because the data can be more readily viewed and analyzed in widely used spreadsheet applications.

[835] Schwab Letter III at 3.

[836] *See* FIF Letter at 32; Schwab III Letter at 3.

[837] *See supra* section III.B.4.a)(2) for a discussion of the utility of the realized spread statistic.

[838] *See* final 17 CFR 242.605(a)(2)(x) and (xi). As discussed above, the Commission is adding a statistic for average midpoint for order executions to the detailed report so that the percentage-based spread statistics in the summary report can be derived from the detailed report. *See supra* notes 589–592 and accompanying text.

[839] *See* FIF Letter at 27.

[840] *See* final 17 CFR 242.605(a)(2)(iii). Pursuant to the definition of ''average midpoint,'' average midpoint for order executions is a share-weighted average. *See* final 17 CFR 242.600(b)(9).

[841] *See* Vanguard Letter at 4.

[842] *See* Nasdaq Letter at 46.

[843] Angel Letter at 3. This commenter stated that additional efforts need to be made to make sure that the summary reports are ''human-friendly'' and provide useful data for comparing brokers. *See id.*

[844] A CSV (comma-separated values) file is a text file in which commas separate the values in each row.

[845] FIF Letter at 5, 32.

[846] *See* final 17 CFR 242.605(a)(2). Rule 605(a)(4) does not apply to the summary report required by Rule 605(a)(2). This is because final Rule 605(a)(2) requires the use of the Commission's schema for CSV format and associated PDF renderer, and therefore the Rule 605 NMS Plan does not establish the formats and fields for the summary report. Further the summary report is not included in Rule 605(a)(4) because the procedures for preparation and posting of the summary report under Rule 605(a)(2) are contained in Rule 605(a)(2), which sets forth the necessary format for the summary report, and Rule 605(a)(5), which requires internet posting.

Because the Rule 605 summary report consists solely of a series of discrete numeric values in a fixed tabular layout, and does not contain elements in nested structures, the sophisticated validations that XML enables would not have provided significant benefits for the Rule 605 summary report.[847] Instead, the CSV format, which yields much smaller file sizes and therefore more efficient processing and storage of data than the XML format, is equally capable of handling the Rule 605 summary report content. The increased usability of the CSV file format will be more relevant to investors and other members of the public viewing and analyzing the summary report than the broader technical coverage of XML. Therefore, the Commission is requiring the use of a schema for CSV format rather than an XML schema. Further, the requirement that the same data be provided through the use of a PDF renderer helps ensure that the summary report is also available in a human-readable format and consistently presented across operating systems and applications.

3. Investor Testing and Education

An industry group and an association of securities regulators both strongly encouraged the Commission to provide investor education or testing to ensure that the summary report is useful.[848] In addition, an academic stated that additional effort needs to be made to make sure the summary report is ''human-friendly and provide[s] useful data for comparing brokers.'' [849] The industry group further stated that ''the industry has expended significant effort and resources to ensure that retail investors have access to educational materials and support necessary to best inform their use of broker-dealer services'' and stated that the Commission was in the best position to educate investors about the use of summary reports.[850] This commenter suggested providing educational resources to retail investors that would help them understand the summary reports and how such information can be used to inform their investment decisions.[851] This commenter also suggested that investors should understand how to interpret varying data in order to facilitate the most accurate cross-comparisons between broker-dealers' execution quality.[852] The association of securities regulators suggested testing the summary report with investors prior to implementation, such as through focus groups, to confirm that the summary report provides useful information for retail investors.[853] An individual supported investor testing and investor roundtables for all equity market system rules recently proposed by the Commission.[854] Several individuals suggested that the Commission should provide clear guidance on how to read and interpret the amended Rule 605 reports.[855]

The Commission does not agree that prescribed testing or investor focus groups or roundtables are needed at this time. Rule 605 has been in existence for over two decades. Although larger broker-dealers will be required to produce the detailed report under Rule 605(a)(1) for the first time, and both market centers and larger broker-dealers will be required to create and post a summary report under Rule 605(a)(2) for the first time, investors should be broadly familiar with many of the execution quality metrics that the summary report is intended to highlight. Further, many commenters, including individuals, supported the proposed summary report as it provides greater access to execution quality data.[856] Notwithstanding any potential insights into the Rule 605 reports that could be gained from testing or focus groups, delay in the adoption of final Rule 605 would delay the benefits of the amendments from accruing.

Some commenters suggested that the Commission directly provide educational resources to individual investors related to the final Rule 605 amendments. However, many market participants, in addition to the Commission,[857] have undertaken efforts to educate retail investors about securities trading and how to compare broker-dealer execution quality, and the Commission expects that these initiatives will continue to inform retail investors about means to evaluate their broker-dealers' performance, including the utilization of summary report statistics. Individual broker-dealers may provide their own educational resources addressing Rule 605 directly to their customers and other market participants and customers of broker-dealers may ask their broker-dealers questions about the Rule 605 reports. Likewise, broker-dealers can provide information about their firms and the nature of their order flow on their websites or through other communications to customers. Further, as stated above, third parties, including analysts, researchers, and the financial press, may also use the summary reports to analyze and compare execution quality across broker-dealers or market centers and provide such information to individual investors in different formats that provide individual investors with alternative ways to engage with Rule 605 data. The Commission therefore does not believe it is necessary to prescribe investor education at this time. However, the Commission will monitor the implementation of Rule 605, including with regard to whether additional information about investor use or analysis of the summary report would be helpful.

V. Requirements for Making Rule 605 Reports Available to the Public

A. Proposed Approach

Prior to these amendments, the requirements for the dissemination of the market center report required by Rule 605 were set forth in paragraphs (a)(2) and (3) of Rule 605.[858] Preexisting Rule 605(a)(2) required every national securities exchange on which NMS stocks are traded and each national securities association to act jointly in establishing procedures for market centers to make the reports required by Rule 605(a)(1) available to the public in a uniform, readily accessible, and usable electronic form.[859] The Commission proposed to amend preexisting Rule 605(a)(2), which would be reorganized into amended Rule 605(a)(3), so that the proposed summary report would also be made available in accordance with the procedures established by the Rule 605 NMS Plan.[860] Further, preexisting Rule 605(a)(2) provided that, in the event there is no effective national market system plan, market centers shall prepare their reports in a consistent, usable, and machine-readable electronic

[847] *See also infra* sections IX.D.1.b)(3) and IX.E.4.b).

[848] *See* SIFMA Letter II at 30; NASAA Letter at 6.

[849] *See* Angel Letter at 3.

[850] *See* SIFMA Letter II at 30.

[851] *See id.* In particular, one commenter suggested educating investors on price impact (as defined in the Order Competition Proposal). *See* Schwab Letter II at 31.

[852] *See* SIFMA Letter II at 31.

[853] *See* NASAA Letter at 6.

[854] *See* letter from Andrew (Mar. 31, 2023).

[855] *See* Letter Type G at *https://www.sec.gov/comments/s7-29-22/s72922.htm* (suggesting this guidance ''especially for retail investors who may not have a deep understanding of the markets'').

[856] *See supra* note 742.

[857] *See, e.g., https://www.sec.gov/education/investor-education*, *https://www.investor.gov/introduction-investing/investing-basics/how-stock-markets-work/executing-order*. The Commission's Office of Investor Education and Advocacy regularly posts investor alerts and bulletins. In addition, *Investor.gov* is an online resource from the Commission's Office of Investor Education and Advocacy to help individual investors ''make sound investment decisions and avoid fraud.'' *See https://www.investor.gov/about-us*.

[858] *See* Proposing Release, 88 FR 3786 at 3824 (Jan. 20, 2023).

[859] *See id.*

[860] *See id.*

format and make such reports available for downloading from an internet website that is free and readily accessible to the public.[861] The Commission proposed to reorganize this provision into amended Rule 605(a)(4) and modify amended paragraph (a)(4) to explicitly refer to the requirements in amended Rule 605(a)(1).[862]

Rule 605(a)(2), prior to these amendments, also specified that the detailed reports required by Rule 605(a)(1) must be posted on an internet website that is free and readily accessible to the public for a period of three years from the initial date of posting.[863] As proposed, these same requirements would be reorganized into amended Rule 605(a)(5) and would be extended to the summary report required under proposed Rule 605(a)(2).[864]

Finally, prior to these amendments, Rule 605(a)(3) specified that the detailed report required by Rule 605(a)(1) must be made available within one month after the end of the month addressed in the report.[865] The Commission proposed to renumber this provision as amended Rule 605(a)(6) and to extend this requirement to the amended Rule 605(a)(2) report.[866]

B. Final Rule and Discussion

1. Accessibility of Rule 605 Reports

The Commission is updating these provisions of preexisting Rule 605 by reorganizing paragraphs (a)(2) and (3) of preexisting Rule 605 into amended paragraph (a)(3) and new paragraphs (a)(4) through (6) as proposed.[867] In the amended paragraphs, the Commission proposed to apply the website posting, timing, and retention requirements to the proposed Rule 605(a)(2) summary report and to extend Rule 605's procedural requirements to brokers and dealers subject to Rule 605. The Commission received no comments regarding the proposed renumbering and reorganization of preexisting Rule 605(a)(2) and (3), but did receive comments on the substance of proposed Rule 605(a)(3). The Commission is adopting paragraphs (a)(3) through (6) of Rule 605 as proposed. These rule provisions set forth the requirements for making the Rule 605 reports accessible to the public, and retaining these requirements from preexisting Rule 605 will continue to provide interested parties with the ability to access the reports easily and efficiently.

Rule 605(a)(3) directs the SROs to act jointly in establishing procedures for market centers, brokers, and dealers to follow in making available to the public the detailed report under Rule 605(a)(1) and summary report under Rule 605(a)(2). The Rule 605 NMS Plan establishes procedures for market centers to make data available to the public in a uniform, readily accessible, and usable electronic form.[868] The Rule 605 NMS Plan requires each market center to arrange with a single plan participant to act as the market center's Designated Participant.[869] The Rule 605 NMS Plan also requires market centers to post their monthly reports on an internet website that is free of charge and readily accessible to the public.[870] Inclusion of Rule 605(a)(2)'s summary reports within the scope of the Rule 605 NMS Plan will promote consistent administration of Rule 605 and allow the Designated Participant for each reporting entity to play a role with respect to the reports required by Rule 605(a)(1) and (2). As is the case for market centers that are not Participants prior to these rule amendments, the Participants will be required to enforce compliance with the terms of the Rule 605 NMS Plan by their members and persons associated with their members.[871] In addition, formatting for Rule 605 data is governed by the Rule 605 NMS Plan. Among other things, the Rule 605 NMS Plan sets forth the file type and structure of the reports and the order and format of fields, yielding reports that are structured and machine-readable.[872] Because of the amendments to Rule 605, the Rule 605 NMS Plan will need to be updated in order to incorporate references to larger broker-dealers subject to Rule 605 and to account for summary reports and the new data fields required to be reported. The compliance period for amending the Rule 605 NMS Plan, and other implementation details, are discussed in *infra* section VII.

With respect to report formatting, an investor advocacy group stated that header data should be included in the Rule 605 reports, arguing that ''it is impossible to understand the reports'' without looking separately to published Commission guidance.[873] This commenter also stated that Rule 605 reports should continue to be made available in a machine-readable format.[874] The Commission agrees that having more ready access to the information needed to understand the content of the reports could be beneficial for market participants. Because the Rule 605 NMS Plan establishes the procedures for reporting entities to follow in making the report available in a uniform, readily accessible, and usable electronic form, the Participants are well-positioned to determine how to include header information in connection with the updates to the record layout for the detailed Rule 605(a)(1) reports.[875] The Commission encourages the Participants to consider whether header information or a more accessible record layout or key should be part of the procedures for making the reports available to the public, especially as it pertains to the detailed Rule 605(a)(1) reports.[876]

In the event that an amendment to the Rule 605 NMS Plan establishing

[861] *See id.* at 3824, n.475.

[862] *See id.*

[863] *See id.* at 3824.

[864] *See id.* at 3824, n.475.

[865] *See id.* at 3825.

[866] *See id.*

[867] *See* final 17 CFR 242.605(a)(3) through (6); Proposing Release, 88 FR 3786 at 3824–25 (Jan. 20, 2023). The Commission proposed to amend current Rule 605 by reorganizing paragraphs (a)(2) and (3) of current Rule 605 as paragraphs (a)(3) through (6) of proposed Rule 605.

[868] *See* final 17 CFR 242.605(a)(3) and Rule 605 NMS Plan. *See also* Rule 605 NMS Plan Release, 66 FR 19814 at 19815 (Apr. 17, 2001). For a discussion of the implementation of amendments to the Rule 605 NMS Plan pursuant to 17 CFR 242.608 (''Rule 608''), see *infra* section VII.

[869] *See* Rule 605 NMS Plan at section VIII. As of January 2024, the parties to the Rule 605 NMS Plan are the 16 registered national securities exchanges trading NMS stocks and one national securities association (the ''Participants''). Although not all market centers are Participants, the Participants are required to enforce compliance with the terms of the Rule 605 NMS Plan by their members and persons associated with their members. *See* 17 CFR 242.608(c). Each market center must notify its Designated Participant of the website where its reports may be downloaded, and each Designated Participant must maintain a comprehensive list of links for all market centers for which it functions as a Designated Participant. *See* Rule 605 NMS Plan at sections IV, VIII(c).

[870] *See* Rule 605 NMS Plan at section VII.

[871] *See* 17 CFR 242.608(c).

[872] *See* Rule 605 NMS Plan at 2 (''Section V . . . provides that market center files must be in standard, pipe-delimited ASCII format'').

[873] *See* Healthy Markets Letter at 16. *See also* Better Markets Letter at 9, n.26 (''We agree with Healthy Market Association that improved header data would go a long way to making Rule 605 Reports more readable, particularly for retail investors, and suggest the Commission make this technical enhancement to the Rule 605 NMS Plan.'').

[874] *See* Healthy Markets Letter at 16.

[875] If the Plan Participants determine to amend the Rule 605 NMS Plan to incorporate headers into the reports, an amendment must be filed with the Commission pursuant to Rule 608 of Regulation NMS. *See* 17 CFR 242.608(a). Amendments to NMS plans are subject to notice and comment, and may be either effective upon filing pursuant to 17 CFR 242.608(b)(3) or subject to action by Commission order before amendments may be effective, pursuant to 17 CFR 242.608(b)(2).

[876] Under Rule 608(a)(2) of Regulation NMS, the Commission may propose amendments to any effective national market system plan. *See* 17 CFR 242.608(a)(2). The Commission could in the future propose an amendment to the Rule 605 NMS Plan to address issues related to the Rule 605 reports.

procedures for market centers, brokers, and dealers to comply with Rule 605 has not been approved by the Commission prior to the compliance date of the amendments to Rule 605, paragraph (a)(4) of Rule 605 provides that market centers, brokers, and dealers shall prepare their reports in a consistent, usable, and machine-readable electronic format, and make such reports available for downloading from an internet website that is free and readily accessible to the public.[877] Paragraph (a)(5) of Rule 605 requires market centers, brokers, and dealers to keep the reports required by Rule 605(a)(1) and (2) posted on an internet website that is free and readily accessible to the public for a period of three years from the initial date of posting. Finally, paragraph (a)(6) of Rule 605 requires market centers, brokers, and dealers to make their Rule 605(a)(1) and (2) reports available within one month after the end of the month addressed in the reports. The Commission received no comments on its proposal to renumber and update paragraphs (a)(4) through (6) of Rule 605 and is adopting paragraphs (a)(4) through (6) of Rule 605 as proposed, for the reasons stated in the Proposing Release.[878] Final Rule 605 will extend these procedural requirements to the Rule 605(a)(2) summary report so that valuable information on order execution quality will be made available to the public without undue delay.[879] Further, the ability to access Rule 605(a)(1) and (2) reports at the same time and the availability of these reports for the same period of time will aid users of the reports in their review and analysis of execution quality data.[880]

2. Alternatives to Rule 605 Proposal

(a) Centralization of Rule 605 Data

In the Proposing Release, the Commission solicited comment on whether to require centralized posting of Rule 605 reports and discussed as an alternative that instead of, or in addition to, having market centers and larger broker-dealers post Rule 605 reports to their websites, the Commission could require these reporting entities to submit their Rule 605 reports to a centralized electronic system, which would then make these reports available to market participants.[881] The Commission stated that the creation of a centralized electronic system could promote greater transparency by better enabling market participants to access and evaluate the reports of multiple reporting entities because the reports would be available at a single location.[882] However, the Commission recognized that the entity responsible for administering the centralized electronic system would incur compliance costs as a result of the creation and maintenance of such a system, and these costs could be passed on to reporting entities in the form of filing fees or to consumers of Rule 605 reports in the form of access fees.[883]

Specifically, the Commission considered two options for how to implement a centralized electronic system. One option would have been for the Commission to require that the Plan Participants establish procedures pursuant to the Rule 605 NMS Plan to provide for the creation and maintenance of a centralized electronic system to serve as a repository for Rule 605 reports and make such reports available for viewing and downloading in a manner that is free and readily accessible to the public.[884] The second option would have been for the Commission to require that reporting entities disclose Rule 605 information directly to the Commission through the Commission's Electronic Data Gathering, Analysis, and Retrieval (''EDGAR'') system, with the Commission subsequently making the information publicly available on EDGAR.[885]

Several commenters supported the centralized posting of Rule 605 reports (summary and detailed).[886] Some of these commenters stated that providing centralized access to Rule 605 reports would ''facilitate accessibility and comparability of the metrics to the benefit of retail customers and market participants'' [887] and that ''market participants would be more likely to use the data to compare execution quality, leading to increased competition and improvements in execution quality.'' [888] Some of these commenters suggested various means of centralizing Rule 605 reports—having FINRA maintain a public database for Rule 605 reports,[889] creating a central repository for Rule 605 reports to be located on a single page on the Commission's website,[890] or working out the details of a central repository through the Rule 605 NMS Plan.[891] An individual investor suggested that the Commission should require the summary and detailed reports to be posted in a centralized electronic system implemented by the Commission that subjects reporting entities to liabilities and has no access fees.[892] An industry group and an investor advocacy group both specifically discouraged the use of EDGAR as the centralization method,[893] stating that the EDGAR system is ''outdated technology'' [894] and ''inadequate for the task.'' [895]

The Commission has considered the comments but is not adopting a requirement for centralized posting of Rule 605 reports for a number of reasons. While several commenters supported the goal of centralizing Rule

[877] The requirements of Rule 605(a)(4) do not apply to the Rule 605(a)(2) summary report because Rule 605(a)(2) specifies the necessary format for the reports, while Rule 605(a)(5) contains the requirement for internet posting.

[878] *See* Proposing Release, 88 FR 3786 at 3824–25 (Jan. 20, 2023).

[879] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75425 (Dec. 1, 2000). If a market center or broker-dealer believes that its particular circumstances warrant an exemption from the provisions of the Rule, it may request an unconditional or conditional exemption pursuant to paragraph (b) of Rule 605. Such an exemption will be granted if the Commission determines that it necessary or appropriate in the public interest, and is consistent with the protection of investors. *See* 17 CFR 242.605(b).

[880] *See* Proposing Release, 88 FR 3786 at 3824–25 (Jan. 20, 2023).

[881] *See id.* at 3825, 3894.

[882] *See id.* at 3894. The Commission also stated that a centralized system could enable programmatic checks that the Rule 605 reports are appropriately standardized, formatted, and complete before posting. *See id.*

[883] *See id.*

[884] *See id.* at 3895.

[885] *See id.* at 3896. Under this alternative, entities would submit Rule 605 information to the Commission, but would not file Rule 605 information with the Commission. Under the Exchange Act, documents filed with the Commission are subject to heightened liability for misstatements contained therein as compared to documents otherwise provided to the Commission (*e.g.,* documents furnished to the Commission). *See* 15 U.S.C. 78ff.

[886] *See* BlackRock Letter at 4; Angel Letter at 3; Fidelity Letter at 8; Healthy Markets Letter at 16; Nasdaq Letter at 46; SIFMA Letter II at 25; J.T. Letter.

[887] Fidelity Letter at 8.

[888] Nasdaq Letter at 46. *See also* BlackRock Letter at 4.

[889] *See* Healthy Markets Letter at 16.

[890] *See* Fidelity Letter at 8.

[891] *See* Angel Letter at 3.

[892] *See* J.T. Letter. This commenter stated that it is ''essential to ensure that these reports are appropriately standardized, formatted, and completed before acceptance through programmatic checks.'' *Id.*

[893] *See* FIF Letter at 33; Healthy Markets Letter at 16.

[894] *See* FIF Letter at 33.

[895] *See* Healthy Markets Letter at 16. Another commenter objected to the standardization and centralization of Rule 605 reports and stated that ''[g]iving away vast amounts of information to free riders (*e.g.,* activists, MEME stock insurgents, and foreign adversaries) increases vulnerabilities'' such as ''MEME events and other irrational exuberance.'' Data Boiler Letter at 27. The Commission does not agree that the standardization and centralization of Rule 605 reports would increase these so-called ''vulnerabilities'' simply by making the reports viewable at one central location in a consistent format because it is unclear how the execution quality information contained in Rule 605 reports would lead to these outcomes.

605 reports, commenters did not have a consensus view on how to accomplish centralization. Further, two commenters expressed specific concerns with the Commission using EDGAR as a centralized repository. The Commission acknowledges that centralization of Rule 605 data, by providing standardization to the reports, could help to make it easier for market participants to access and evaluate Rule 605 reports. However, developing a centralized repository and procedures for reporting entities to follow, whether done by the Commission or by Plan Participants, could potentially result in implementation time delays and require the expenditure of considerable technology and personnel resources. Further, although a centralized repository could lower search cost for market participants, even without centralization, Rule 605 reports will be required to be readily available and accessible.[896]

The changes to Rule 605 discussed herein will expand the scope of the reports and improve the usefulness of the execution quality statistics provided and made public. For example, the addition of a reporting requirement for larger-broker dealers will provide investors with information that they could use to compare the execution quality provided by different broker-dealers. The current disclosure requirements set forth in the amended rule and under the Plan will help ensure that implementation of final Rule 605 will proceed in a timely manner.[897]

(b) Generation of Order Execution Quality Reports Using CAT Data

As an alternative to the proposed Rule 605 amendments, the Commission asked for comment on using CAT data to have either the Commission or the CAT NMS Plan Processor[898] provide execution quality information to the public at monthly (or more frequent) intervals. This alternative would have effectively eliminated the need for market centers and larger broker-dealers to prepare Rule 605 reports.[899]

A few commenters supported the use of CAT data to produce Rule 605 reports.[900] An investment advisory firm stated that utilizing CAT data to create a report and making such reports easily accessible in one location ''will likely result in a meaningful increase in transparency for investors.'' [901] An asset management firm stated that if every reporting firm generates its own reports, there would be ''needless duplication of the costs and burdens associated with the implementation and ongoing maintenance of disclosures,'' and that ''a centralized processor for Rule 605 reports would also eliminate the inevitable inconsistencies or errors which arise when independent systems are responsible for creating reports.'' [902] Another broker-dealer specified that ''for the sake of consistency and transparency, FINRA is best positioned to provide these reports'' through the use of CAT data.[903] Several commenters also stated that a central Rule 605 report processor would lower compliance burdens for broker-dealers.[904] An industry group stated that if FINRA/CAT is not used to produce all Rule 605 reports, but FINRA prepares its own Rule 605 data for regulatory purposes, such FINRA data/report should be made available to the relevant firm.[905]

The Commission recognizes the value in having one entity calculate the statistics required under Rule 605 and produce execution quality disclosures because it could result in more standardized data. This in turn could help facilitate one of the primary goals of the Rule 605 amendments—to enhance order execution quality reporting to better enable investors to compare and evaluate execution quality among different market centers and larger-broker-dealers. This approach could also allow for the publication of execution quality data for all broker-dealers instead of just those that meet the customer account threshold. However, there are potentially significant costs and time delays associated with implementation of this alternative. The obstacles associated with authorizing and enabling FINRA CAT to prepare execution quality disclosures could hinder the ability of investors and market participants more broadly to have ready access to enhanced execution quality information. Rule 605, as adopted, will require updated disclosure within a comparatively shorter timeframe.[906] However, the Commission will continue to monitor this alternative in the context of the implementation of CAT and may in the future consider whether execution quality disclosure utilizing CAT data is practicable or advisable.

If the Commission in the future determines that CAT data should be utilized to produce execution quality disclosures, the Commission could also consider whether to eliminate the requirement that market centers and broker-dealers themselves produce Rule 605 reports in that context.

An industry group stated that ''[t]o the extent FINRA/CAT are not utilized to produce Rule 605 reports, the Commission or FINRA should be required to provide a publicly available data template that specifies *exactly* how a market center or broker-dealer's Rule 605 reports should be produced.'' [907] The commenter further stated that ''[d]oing so would establish a standardized metric consistent with regulators' expectations and reduce any regulatory risks reporting entities may face from having to make independent interpretations of various reporting requirements.'' [908] Although the Commission will not publish an exact data template for the detailed reports, the NMS Plan required by Rule 605(a)(3) will establish procedures for making the detailed report available to the public in a ''uniform, readily accessible, and usable electronic form.'' [909] Further, Rule 605(a)(2) requires the summary report to be made available using the schema for CSV published on the Commission's website.[910] In addition, the Commission is providing herein a detailed discussion of the final rule, including responses to issues and questions raised by commenters. Therefore, reporting entities will have

[896] *See* final 17 CFR 242.605(a)(5).

[897] In May 2023, FINRA requested comment on whether to require its members to provide Rule 605 reports to FINRA for centralized publication. *See* FINRA Regulatory Notice 23–10 (May 31, 2023) (''Regulatory Notice''). FINRA stated in the Regulatory Notice that the proposed requirement to provide Rule 605 reports to FINRA would supplement, not replace, firm's current obligations under Rule 605. *See* Regulatory Notice at 3. Comments received on FINRA Regulatory Notice 23–10 are *available at https://www.finra.org/rules-guidance/notices/23-10#comments.*

[898] As set forth in the National Market System Plan for the Consolidated Audit Trail (''CAT NMS Plan''), the CAT NMS Plan Processor is required to develop and, with the prior approval of the Operating Committee, implement policies, procedures, and control structures related to the CAT System that are consistent with 17 CFR 242.613(e)(4), and Appendix C and Appendix D of the CAT NMS Plan. *See* Securities Exchange Act Release No. 79318 (Nov. 15, 2016), 81 FR 84696 at 84704, n.136 (Nov. 23, 2016) (order approving the CAT NMS Plan).

[899] *See* Proposing Release, 88 FR 3786 at 3897 (Jan. 20, 2023).

[900] *See* Angel Letter at 3; Black Rock Letter at 4; Fidelity Letter at 8; FIF Letter at 32; Healthy Markets Letter at 16; SIFMA Letter II at 27; State Street Letter at 2; Tastytrade Letter at 4; LPL Financial Letter at 4.

[901] LPL Financial Letter at 4.

[902] BlackRock Letter at 4.

[903] Tastytrade Letter at 4.

[904] *See* Angel Letter at 3; Black Rock Letter at 4; Fidelity Letter at 8; SIFMA Letter II at 27; State Street Letter at 2.

[905] *See* SIFMA Letter II at 27; *see also* Healthy Markets Letter at 16 (''we recommend that as part of its access to CAT data to create 605 reports as part of their regulatory oversight/surveillance, FINRA should make its report cards publicly available'').

[906] *See infra* section VII.

[907] SIFMA Letter II at 26.

[908] *Id.* at 26–27.

[909] Final 17 CFR 242.605(a)(3).

[910] *See* final 17 CFR 242.605(a)(2).

the information needed to produce Rule 605 reports in a uniform manner.

VI. Existing Commission Exemptive Relief and Staff Statements

Upon the compliance date of the amendments to Rules 600 and 605, the Commission exemptive relief and staff statements listed below will be withdrawn. To the extent any staff statement is inconsistent with or conflicts with the requirements of Rule 600 or Rule 605, as amended, even if not specifically identified below, those statements are superseded.

Name	Date	Topic
Market Systems Exemptive Letter, Opening Exemption only	June 22, 2001	Orders received during regular trading hours at a time when an NBBO is being disseminated but prior to the dissemination of the primary listing market's first firm, uncrossed quotations for a trading day.
Large Order Exemptive Relief	June 22, 2001	Any order with a size of 10,000 shares or greater.
2001 FAQ, Questions 19, 24, and 27 only	June 25, 2001	Orders received prior to dissemination of quotations by primary listing SRO, riskless principal orders, and exemption for block orders.
2013 FAQ, Question 2 only	Feb. 25, 2013	Non-exempt short sale orders.

As discussed in section III.A.1, the Commission is incorporating the Opening Exemption into the definition of covered order with respect to market or limit orders received during regular trading hours at a time when an NBBO is being disseminated.[911] The Commission did not receive any comments opposing the proposed incorporation of the Opening Exemption into rule text or the rescission of the Opening Exemption in the 2001 Exemptive Letter. The Commission is rescinding the Opening Exemption as proposed, for the reasons discussed in the Proposing Release and in section III.A.1. The rescission of the Opening Exemption supersedes a staff FAQ.[912]

In addition to the Opening Exemption, the Market Systems Exemptive Letter included a separate exemption from Rule 605 for orders received during a time when the consolidated best bid and offer (''BBO'') reflects a spread that exceeds $1 plus 5% of the midpoint of the consolidated BBO (''Spread Width Exemption'').[913] As proposed, the Commission is not modifying or rescinding the Spread Width Exemption. Orders received during a time when the consolidated BBO reflects a spread that exceeds $1 plus 5% of the midpoint of the consolidated BBO ''could be the result of potentially erroneous quotes or of abnormal trading conditions'' and their inclusion ''could significantly affect the comparability and reliability of the execution quality measures in market center monthly reports.'' [914]

As discussed in section III.B.1, commenters supported the inclusion of larger-sized orders, which necessarily requires the recission of the Large Order Exemptive Relief.[915] The Commission is rescinding the Large Order Exemptive Relief as proposed, for the reasons discussed in the Proposing Release and in section III.B.1. The rescission of the Large Order Exemptive Relief supersedes the relevant staff FAQ.[916]

Finally, two additional staff FAQs are specifically superseded by Rule 605, as amended, and the guidance contained in this release.[917] First, the final rule incorporates a provision that supersedes current staff statements regarding the treatment of riskless principal orders. Specifically, adopted Rule 605(a)(1)(i)(D) provides that the number of shares of covered orders executed at the receiving market center, broker, or dealer excludes shares that the market center, broker, or dealer executes on a riskless principal basis.[918] Second, as proposed, the Commission is providing guidance that non-exempt short sale orders will not be special handling orders unless a price test restriction is in effect for the security.[919] The FAQs will be updated accordingly consistent with these changes.

VII. Transition Matters

The Commission is providing a transition period between when the amendments to Rule 605 are adopted and when the changes are fully implemented. As discussed above, the Rule 605 NMS Plan establishes procedures for market centers to make data available to the public in a uniform, readily accessible, and usable electronic form.[920] In addition, formatting for Rule 605 data is governed by the Rule 605 NMS Plan, which sets forth, among other things, the file type and structure of the reports and the

[911] *See supra* section III.A.1.b).

[912] *See* Staff Legal Bulletin No. 12R, ''Frequently Asked Questions About Rule 11Ac1–5'' (June 22, 2001) (''2001 FAQs''), Question 19.

[913] *See* Market Systems Exemptive Letter at 2.

[914] *Id.*

[915] *See supra* notes 351–355 and accompanying text.

[916] *See* 2001 FAQs, Question 27.

[917] *See* 2013 FAQs, Question 2; and 2001 FAQs, Question 24.

[918] One commenter requested confirmation that execution quality metrics reported under Rule 605 include execution quality information for riskless principal orders. *See supra* note 688 and accompanying text.

[919] *See supra* section III.A.2.b).

[920] *See* prior 17 CFR 242.605(a)(2) and Rule 605 NMS Plan. *See also* Rule 605 NMS Plan Release, 66 FR 19814 at 19815 (Apr. 17, 2001).

order and format of fields.[921] As described in section V.B.1 above, the Commission is adopting paragraph (a)(3) of Rule 605 as proposed to direct the SROs to act jointly in establishing procedures for market centers, brokers, and dealers to follow in making Rule 605 reports available to the public. Because of the amendments to Rule 605 that the Commission is adopting, the Rule 605 NMS Plan will need to be updated to: (1) incorporate references to broker-dealers subject to Rule 605; (2) account for summary reports that will be required under Rule 605(a)(2); and (3) incorporate the new data fields that will be required under Rule 605(a)(1) for the detailed reports.[922] In addition, larger broker-dealers and market centers will need time to test and implement programming and systems changes in order to comply with Rule 605 as amended.

The Proposing Release did not include a proposed compliance date for final Rule 605, but several commenters recommended that the Commission provide a sufficient implementation period for the proposed Rule 605 amendments, including an industry group that recommended a minimum of one year and an industry group that recommended a minimum of one year from ''approval of applicable Plan amendments.'' [923] One of these industry groups suggested that the Commission should not require the inclusion of any data relating to the best available displayed price ''until the best odd-lot order to buy and the best odd-lot order to sell have been included in the SIP and firms have had a reasonable time period, subsequent to such inclusion, to incorporate this data into their Rule 605 reports.'' [924] This industry group also stated that the implementation timetable for final Rule 605 should ''commence from the date that the Commission publishes guidance in response to interpretive questions from industry members'' regarding the adopted reporting requirements.[925] However, an investor advocacy group recommended implementation of the proposed changes to Rule 605 ''without delay.'' [926] In addition, a national securities exchange stated that deferring ''key implementation details'' to the Participants ''may introduce additional complications and further delay implementation of the Rule 605 Proposal since NMS Plan Participants would first need to reach agreement and then file amendments to the Rule 605 NMS Plan with the Commission, which the Commission would need to approve.'' [927]

The amendments to Rule 605 discussed herein shall become effective 60 days after the date of publication in the **Federal Register** (''Effective Date''). The compliance date shall be 18 months after the Effective Date (''Compliance Date'').[928] This amount of time is consistent with the commenter's request that the Commission provide a minimum implementation period of one year following adoption of amendments to Rule 605.[929] The Commission also recognizes that preexisting market centers and vendors will need time to update their systems and processes to ensure that data responsive to the amended requirements are correctly collected and formatted, and that larger broker-dealers and market centers newly subject to Rule 605 will need time to create such systems and processes. Although two commenters referred to a potentially longer timeframe for implementation,[930] the adopted timeframe will allow the benefits of the amended rule to be achieved sooner and therefore the Commission is adopting the implementation timeframe discussed in this section. After considering the comments, the Commission agrees that implementation of Rule 605 as amended should not be unnecessarily delayed because the modifications to Rule 605 that the Commission is adopting will expand its scope and improve the usefulness of the execution quality statistics that reporting entities will make available pursuant to Rule 605.

As part of the implementation process, and pursuant to the requirement in paragraph (a)(3) of Rule 605 as amended directing the SROs to act jointly in establishing procedures for market centers, brokers, and dealers to follow in making Rule 605 reports available to the public, the Rule 605 NMS Plan Participants (16 national securities exchanges and one national securities association) will need to file with the Commission a proposed Rule 605 NMS Plan amendment updating the Plan to reflect the amendments made herein to Rule 605, pursuant to Rule 608(a)(1) of Regulation NMS. The NMS Plan Participants are the appropriate parties to update the Rule 605 NMS Plan provisions given their experience in administering the Rule 605 NMS Plan since its approval by the Commission in 2001. Many of the detailed issues relating both to the format of the reports under Rule 605 as amended, and to the means of access to the reports, are appropriately addressed in the context of approval of an amendment to the

[921] *See* Rule 605 NMS Plan Release, 66 FR 19814 at 19815 (Apr. 17, 2001) (''Section V . . . provides that market center files must be in standard, pipe-delimited ASCII format'').

[922] The Rule 605 NMS Plan details procedures for market centers to follow and, among other things, specifies the order and format of fields in a manner that aligns with Rule 605(a)(1). *See* Rule 605 NMS Plan generally and section VI.(a) of the Rule 605 NMS Plan. As is currently the case for market centers that are not Participants, the Participants will be required to enforce compliance with the terms of the Rule 605 NMS Plan by their members and persons associated with their members. *See* 17 CFR 242.608(c).

[923] *See* letter from Andrew M. Saperstein, Co-President, Morgan Stanley (Mar. 31, 2023) (''Morgan Stanley Letter'') at 7 (''The proposed amendments to Rule 605 involve a host of changes, including the introduction of new order types in scope, which will require broker-dealers and their vendors to adopt new processes and controls.''); SIFMA Letter II at 27 (recommending a minimum implementation period of one year and ''ideally two years'' following adoption of proposed Rule 605 ''to allow for the industry, SROs, and the Commission to ensure that revised Rule 605 reports are produced in a consistent way''); FIF Letter at 5, 33 (proposing that the implementation period should be a minimum of one year from the Commission's approval of applicable Plan amendments).

[924] FIF Letter at 33.

[925] FIF Letter III at 5 (''If the Commission does not publish proposed specifications prior to adopting a final rule, FIF members recommend that any implementation timetable commence from the date that the Commission publishes guidance in response to interpretive questions from industry members relating to the reporting requirements that the Commission adopts.'').

[926] *See* Healthy Markets Letter at 16. An industry group and a broker-dealer recommended implementing changes to Rule 605 before any of the other changes to the U.S. equity market structure that the Commission has proposed in order to provide a baseline for measuring market quality. *See* FIF Letter at 1, 33 (recommending implementation of proposed Rule 605 reporting changes at least one year prior to other changes); Morgan Stanley Letter at 2 (recommending a staggered approach to changes to U.S. equity market structure, starting with changes to Rule 605). *See also supra* note 79 and accompanying text (discussing other commenters' views on Rule 605 sequencing).

[927] NYSE Letter at 8.

[928] With respect to the compliance date, commenters requested that the Commission consider interactions between the proposed rule and other recent Commission rules. *See supra* note 79. In determining compliance dates, the Commission considers the benefits of the rules as well as the costs of delayed compliance dates and potential overlapping compliance dates. For the reasons discussed throughout the release, to the extent that there are costs from overlapping compliance dates, the benefits of the rule justify such costs. *See infra* sections IX.C.1.d) and IX.D.2.a)(5) for a discussion of the interactions of final Rule 605 with certain other Commission rules.

[929] *See* SIFMA Letter II at 27.

[930] *See id.* (stating the Commission should provide for an implementation period of ''ideally two years following adoption of the Rule 605 Proposal'') and FIF Letter at 33 (stating the Commission's implementation period should be a ''minimum of one year from the Commission's approval of applicable Plan amendments''). Amendments to NMS plans are subject to notice and comment, and may be either effective upon filing pursuant to 17 CFR 242.608(b)(3) or subject to action by Commission order before amendments may be effective, pursuant to 17 CFR 242.608(b)(2).

Rule 605 NMS Plan.[931] However, while the Rule 605 NMS Plan Participants will need to determine how to address certain technical elements of Rule 605,[932] the modifications that will need to be made by the Rule 605 NMS Plan generally will be dictated by Rule 605 as amended (*e.g.,* updates to the list of fields included in the reports required by Rule 605(a)(1)).

In accordance with Rule 605 as amended, the Rule 605 NMS Plan amendment will need to establish procedures for market centers, brokers, and dealers to follow in making Rule 605 reports publicly available.[933] Notice of the proposed amendment to the Rule 605 NMS Plan and the opportunity for comment will be provided.[934]

In addition, market centers, brokers, and dealers will need to make necessary preparations to be in a position to comply with Rule 605 as amended by the Compliance Date.[935] The Compliance Date strikes an appropriate balance between: (1) affording brokers, dealers, and market centers sufficient time to program their systems and implement business process changes necessary to comply with the new rules; and (2) requiring that the execution quality statistics in their Rule 605 reports become available to investors in a timely manner.

The Compliance Date is designed to allow time for both an amendment to the Rule 605 NMS Plan and time for brokers, dealers, and market centers time to comply with Rule 605 as amended.[936]

Notwithstanding the Compliance Date, reporting entities will not be able to calculate the price improvement statistics relative to best available displayed price that will be required to be included in the detailed reports required by Rule 605(a)(1) for marketable order types, marketable stop orders, and midpoint-or-better order types until odd-lot order information is made available pursuant to an effective transaction reporting plan or effective national market system plan.[937] The MDI Rules included odd-lot information in the data that will be made available within the national market system. Although the Commission adopted the MDI Rules, the MDI Rules have not been implemented.[938] Once odd-lot order information is made available pursuant to an effective national market system plan, market centers, brokers, and dealers will need time to make any program updates and changes to their business processes that are necessary to calculate the price improvement statistics relative to the best available displayed price. In order for odd-lot order information to be made available pursuant to an effective national market system plan, participants will need to file with the Commission a proposed NMS plan or a proposed amendment to an NMS plan pursuant to Rule 608(a)(1) of Regulation NMS. Any such filing will be subject to public comment and Commission approval by order before the effectiveness of such plan or plan amendments pursuant to Rule 608(b)(2) of Regulation NMS. A Commission order approving a proposed plan or plan amendment making odd-lot information available will provide market participants notice of when odd-lot order information will be required to be made available. Further, to the extent that odd-lot information is collected, consolidated, and disseminated by the effective national market system plan(s), market participants will be provided notice of the availability of such information through usual communication channels that may be established by the competing consolidator(s) or that are used by exclusive SIPs, to the extent exclusive SIPs collect, consolidate, and disseminate odd-lot information pursuant to an effective national market system plan. Market centers, brokers, and dealers will have six months after odd-lot order information sufficient to calculate the best available displayed price is made available pursuant to an effective national market system plan to start including price improvement statistics relative to the best available displayed price in their Rule 605 reports.

VIII. Paperwork Reduction Act

Certain provisions of the rule amendments contain ''collection of information'' requirements within the meaning of the Paperwork Reduction Act of 1995 (''PRA'').[939] The Commission requested comment on the collection of information requirements in the Proposing Release and submitted relevant information to the Office of Management and Budget (''OMB'') for review in accordance with 44 U.S.C 3507(d) and 5 CFR 1320.11. The Commission is altering an existing collection of information and applying such collection of information to new categories of respondents. The title of such existing collection of information is: Rule 605 of Regulation NMS (f/k/a Rule 11Ac1–5).[940] An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the agency displays a currently valid control number.

Views of commenters relevant to the Commission's analysis of the reporting burdens imposed by the collection of information for Rule 605 as proposed are discussed below. In addition, certain estimates have been modified, as necessary, to conform to the adopted amendments and to reflect the most recent data available to the Commission.

A. Summary of Collection of Information

The amendments create burdens under the PRA by: (1) adding new categories of respondents to the existing collection of information and (2) modifying the requirements of such existing collection of information. The

[931] For example, in the Proposing Release, the Commission discussed potential alternatives to the website posting of Rule 605 reports, including, among other things, requiring Rule 605 NMS Plan Participants to amend the Rule 605 NMS Plan to create a centralized electronic system repository for Rule 605 reports. *See* Proposing Release, 88 FR 3786 at 3895–96 (Jan. 20, 2023).

[932] Because an amendment to the Rule 605 NMS Plan will address certain technical elements of Rule 605, the Commission does not agree that it is necessary to commence implementation after publication of any Commission guidance. *See* FIF Letter III at 5. As noted above, amendments to NMS plans are subject to notice and comment. *See supra* note 930.

[933] Because final Rule 605(a)(2) requires the use of the Commission's schema for CSV and the associated PDF renderer, the Rule 605 NMS Plan will not establish the formats and fields for the summary reports.

[934] *See* 17 CFR 242.608(b).

[935] If the Rule 605 NMS Plan does not incorporate the necessary changes to Rule 605 in advance of the Compliance Date, final Rule 605(a)(4) will govern and the Compliance Date will still apply. As described further above in section V.B.1, final Rule 605(a)(4) will require that in the event that there is no effective national market system plan establishing required procedures, market centers, brokers, and dealers shall prepare their reports in a consistent, usable, and machine-readable electronic format, in accordance with the requirements in final Rule 605(a)(1), and make such reports available for downloading from a website that is free and readily accessible to the public.

[936] *See supra* note 923 and accompanying text.

[937] *See* final 17 CFR 242.605(a)(1)(ii)(M) through (Q).

[938] The Commission has outlined a phased transition plan for the implementation of the MDI Rules, including the implementation of odd-lot order information to be disseminated by competing consolidators. *See* Proposing Release, 88 FR 3786 at 3820, n.422 (Jan. 20, 2023). The Commission is still considering whether to adopt the proposed changes in the Minimum Pricing Increments Proposal to accelerate the implementation of the odd-lot information definition and have odd-lot order information disseminated by the exclusive SIPs. *See* Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80295–99 (Dec. 29, 2022). If, in the future, the Commission accelerates implementation of this aspect of the MDI Rules, implementation of the modifications to the odd-lot definition and dissemination of odd-lot order information pursuant to an effective national market system plan would proceed on a revised timeframe as designated by the Commission at such time.

[939] 44 U.S.C. 3501 *et seq.*

[940] OMB Control Number 3235–0542.

amendments do not create any new collections of information.

The categories of new respondents subject to Rule 605, as amended, are larger broker-dealers and new market centers, consisting of SDPs and entities that act as market centers for orders that were previously not covered by Rule 605, *e.g.,* orders smaller than 100 shares.

The amendments modify both the scope of the standardized monthly reports required under Rule 605 and the required information. Rule 605, as amended: (1) expands the definition of ''covered order'' to include certain orders submitted outside of regular trading hours, certain orders submitted with stop prices, and non-exempt short sale orders; (2) modifies the existing order size categories to base them on notional value as well as whether an order is for less than a share, for an odd-lot, or for a round lot or greater rather than number of shares; (3) creates four new order type categories (marketable IOCs, executable market orders submitted with stop prices, executable marketable limit orders submitted with stop prices, and executable non-marketable limit orders submitted with stop prices) and replaces three existing categories of non-marketable order types with four new categories of order types (midpoint-or-better limit orders, midpoint-or-better IOCs, executable NMLOs, and NMLO IOCs); (4) modifies current time-to-execution reporting buckets; (5) modifies realized spread statistics to require realized spread to be calculated after 50 milliseconds, 1 second, 15 seconds, 1 minute, and 5 minutes; and (6) requires new statistical measures of execution quality including average effective spread divided by quoted spread, percentage effective and realized spread statistics, a size improvement benchmark and statistic, and certain statistical measures that could be used to measure execution quality of NMLOs. The amendments require all reporting entities to make a summary report available that will be formatted using the most recent versions of the schema for CSV format and the associated PDF renderer as published on the Commission's website. Finally, as a result of the amendments to Rule 605, Rule 605 NMS Plan Participants will need to amend the Rule 605 NMS Plan to account for the new data fields.

B. Proposed Use of Information

The purpose of the information collection is to make information about order execution practices available to the public and allow investors, broker-dealers, and market centers (which include exchange markets, OTC market makers, and ATSs) [941] to undertake a comparative analysis of these practices across markets. Broker-dealers may use the information to make more informed choices in deciding where to route orders for execution and to evaluate their internal order handling practices. Investors may use the information to evaluate the order handling practices of their broker-dealers. Market centers may use the information to compete on the basis of execution quality.

C. Respondents

The collection of information obligations of Rule 605 applies to larger broker-dealers and market centers that receive covered orders in national market system securities (collectively, ''reporting entities''). The Commission estimates that there are approximately 228 reporting entities (91 OTC market makers, plus 16 national securities exchanges, 1 national securities association, 87 exchange market makers, and 33 ATSs) under Rule 605 prior to these amendments.[942] However, under the amendments, the Commission estimates there will be 343 reporting entities (91 OTC market makers, 85 broker-dealers that introduce or carry 100,000 or more customer accounts,[943] 16 national securities exchanges, 1 national securities association, 87 exchange market makers, 33 ATSs,[944] plus 30 new market center respondents [945]) that will be subject to the collection of information obligations of Rule 605. Each of these respondents will be required to respond to the collection of information on a monthly basis.

In addition, the amendments to Rule 605 will require the Rule 605 NMS Plan Participants (16 national securities exchanges and 1 national securities association) to prepare and file an amendment to the Rule 605 NMS Plan.

D. Total PRA Burdens

Rule 605, as amended, will require broker-dealers and market centers to make available to the public monthly order execution reports in electronic form. Broker-dealers and market centers retain most, if not all, of the underlying raw data necessary to generate these reports in electronic format or, if they do not, may obtain this information from publicly available data sources.[946] Consequently, Rule 605 will not require new data collection or recordkeeping burdens. Respondents could either program their systems to generate the statistics and reports, or transfer the data to a service provider (such as an independent company in the business of preparing such reports or an SRO) that would generate the statistics and reports.

The currently approved PRA for prior Rule 605 estimates that each respondent spends 6 hours a month to collect the data necessary to generate the reports, or 72 hours per year.[947] In the Proposing Release, the Commission estimated that each respondent would spend 8 hours a month, or 96 hours per year, on an ongoing basis, to comply with Rule 605 as proposed to be amended.[948]

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[941] *See* final 17 CFR 242.600(b)(55).

[942] The PRA for preexisting Rule 605 estimates 319 reporting entities (153 OTC market makers, plus 24 national securities exchanges, 1 national securities association, 80 exchange market makers, and 61 ATSs). The Commission's method of estimating the reporting entities for the Commission's currently approved PRA for prior Rule 605 was over-inclusive. For example, it included national securities exchanges and ATSs that do not trade NMS stocks and broker-dealers that may trade NMS stocks but are not market makers. Based on updated estimates of the number of respondents, the Commission now estimates that there are only 228 current reporting entities.

[943] These 85 brokers-dealers include 39 broker-dealers that act as introducing brokers. The Commission initially estimated there would be 85 broker-dealers that introduce or carry 100,000 or more customer accounts, which included 37 broker-dealers and 48 carrying broker-dealers. *See* Proposing Release, 88 FR 3786 at 3826 (Jan. 20, 2023). The Commission updated this estimate based on the FYE 2022 FOCUS Reports received by the Commission and data from CAT for calendar year 2022. *See infra* Table 13.

[944] As of Nov. 21, 2023, there are 33 NMS Stock ATSs that have filed an effective Form ATS–N with the Commission.

[945] These 30 new market center respondents consist of 20 market centers that will need to produce reports as a result of including fractional share orders within the scope of Rule 605 and 10 SDPs. The Commission initially estimated there would be 38 new market center respondents, which included 8 entities that would operate qualified auctions. *See* Proposing Release, 88 FR 3786 at 3826 (Jan. 20, 2023). Because final Rule 605 does not include a requirement that entities operating qualified auctions report separately, the Commission is revising its estimate to include 30 new market center respondents.

[946] National securities exchanges, national securities associations, and registered brokers and dealers are subject to existing recordkeeping and retention requirements including 17 CFR 240.17a–1 (''Rule 17a–1'') (for SROs); 17 CFR 240.17a–3 (''Rule 17a–3'') and 240.17a–4 (''Rule 17a–4'') (for broker-dealers). *See* Rules 17a–1, 17a–3, and 17a–4. The Commission's estimates include Rule 605's requirement that reporting market centers and broker-dealers keep Rule 605 reports posted on an internet website that is free and readily accessible to the public for a period of three years from the initial date of posting on the internet website. *See* final 17 CFR 242.605(a)(5).

[947] *See infra* note 953.

[948] *See* Proposing Release, 88 FR 3786 at 3826–27 (Jan. 20, 2023).

One commenter stated that the proposal did not include burdens related to business-line personnel or technical staff.[949] Further, one commenter stated that the Commission's compliance cost estimates were too low because the Commission neglected to take into account dedicated staff time needed for data reconciliation and validation and other ongoing compliance costs.[950] The commenters provided no data and provided no alternative estimates of the cost of preparing the monthly reports.

In response to the commenters, the Commission is adjusting its estimated annual burdens to account for work to be performed by technical staff, as described below. In addition, the Commission is adjusting the hourly rates used to monetize burden hours in order to account for recent inflation rates.

The Commission estimates that the initial and ongoing burdens will be different for those respondents that are already required to prepare reports and for new respondents. The Commission estimates that Rule 605 amendments will result in an initial burden for current respondents of 50 hours per respondent[951] for systems updates to ensure that data responsive to the amended requirements is correctly collected and formatted. The initial burden estimate represents the work that will need to be done by existing respondents to modify their systems to collect data required under the amendments to Rule 605 and generate the monthly reports. The estimate includes time required to program and test automated systems to collect the necessary data, as well as review and approval by compliance personnel. The Commission does not believe the information required to be aggregated and included in Rule 605 reports, as amended, will require preexisting respondents to acquire new hardware or systems to process the information required in the reports. The Commission further estimates that the Rule 605 amendments will result in an ongoing monthly burden of 11 hours per respondent to collect the necessary data and to prepare the required Rule 605 reports, for a total annual burden of 132 hours per respondent.[952] This estimate represents an increase of 3 hours per respondent over the Commission's initial estimate because it accounts for technical staff time that will be required to verify automated processes are functioning as intended and post and prepare the required reports, or transfer data to a service provider to generate the reports.[953] This estimate has been revised from the Proposing Release in response to commenters who stated that the Commission did not adequately account for technical staff.[954] With an estimated 228 respondents already subject to Rule 605, the total initial burden to comply with the Rule 605 amendments is estimated to be 11,400 hours while the monthly reporting requirement is estimated to be 30,096 hours per year (228 × 132). The burdens for respondents currently reporting under Rule 605 are likely to be lower than those of new reporting entities because currently reporting entities already have systems in place to collect the data necessary to generate reports under the current rule. These estimates include the impact of preparing and making summary reports available using the most recent versions of the schema for CSV format and the associated PDF renderer as published on the Commission's website.

The Commission estimates that Rule 605 amendments will result in an initial burden for new respondents of 100 hours for each respondent[955] for systems updates to ensure that data responsive to the amended requirements is correctly gathered and formatted. This burden is higher than the estimated burden for current respondents because new respondents do not currently have in place the systems to collect the information required for current Rule 605 reports. These respondents will likely require additional time to collect the relevant information. In addition, this estimate includes additional time for programming and testing automated systems to collect the necessary data and additional hours for review and approval by compliance personnel. Once the relevant data are collected, respondents could either program their systems to generate the reports or transfer the data to a service provider that will generate the reports. Respondents will likely not be required to acquire new hardware or other technological resources to be able to collect the data required by the amended rule given that respondents already have computing systems in place to, for example, transmit and process order information, and such systems could be leveraged to collect the required data. Further, to the extent a respondent does not have the technological capabilities or resources to generate the reports in-house, such respondents will likely utilize a service provider, as discussed below.

[949] *See* Data Boiler Letter at 21.

[950] *See* Robinhood Letter at 42 (stating that annual costs of up to $42,000 per year is ''an underestimation of annual costs'').

[951] The Commission estimates the monetized initial burden for this requirement to be $4,577,100. The Commission derived this estimate based on per hour figures from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead: [(Sr. Programmer at $399 for 25 hours) + (Sr. Systems Analyst at $343 for 10 hours) + (Compliance Manager at $373 for 10 hours) + (Director of Compliance at $588 for 5 hours)] = $20,075 per respondent for a total initial monetized burden of $4,577,100 ($20,075 × 228 respondents).

[952] The Commission estimates the monetized annual burden for this requirement to be $11,775,744. The Commission derived this estimate based on per hour figure from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead: [((Compliance Attorney at $440 for 6 hours) + (Compliance Manager at $373 for 2 hours) + (Programmer at $301 for 2 hours) + (Systems Analyst at $316 for 1 hour)) × 12 reports per year] = $51,648 per respondent for a total annual monetized burden of $11,775,744 ($51,648 × 228 respondents).

[953] The Commission's currently approved PRA for prior Rule 605 (OMB Control Number 3235–0542), last updated in Apr. 2022, estimates that current respondents each will spend 6 hours per month to collect the data necessary to generate the reports, or 72 hours per year. Although the amendments to Rule 605 will require additional data fields and the generation of summary reports, the data collection and report generation process will be an automated process that will not require substantial additional burden hours after initial set-up.

[954] *See supra* notes 949–950 and accompanying text. Specifically, although the commenters did not provide an estimate of the costs or time burdens that would be attributable to work performed by technical staff, the Commission is allocating 2 hours to a programmer and 1 hour to a systems analyst to account for technical assistance that may be necessary to ensure automated processes are functioning as intended.

[955] The Commission estimates the monetized initial burden for this requirement to be $4,617,250. The Commission derived this estimate based on per hour figure from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead: [(Sr. Programmer at $399 for 50 hours) + (Sr. Systems Analyst at $343 for 20 hours) + (Compliance Manager at $373 for 20 hours) + (Director of Compliance at $588 for 10 hours)] = $40,150 per respondent for a total initial monetized burden of $4,617,250 ($40,150 × 115 respondents).

The Commission estimates that the Rule 605 amendments will result in an ongoing monthly burden of 11 hours to collect the necessary data and to prepare the required Rule 605 reports, for a total annual burden of 132 hours per respondent.[956] With an estimated 115 new respondents subject to Rule 605, the total initial burden to comply with the Rule 605 amendments is estimated to be 11,500 hours while the monthly reporting requirement is estimated to be 15,180 hours per year (115 × 132). These estimates include the impact of preparing and making summary reports available using the most recent versions of the schema for CSV format and the associated PDF renderer as published on the Commission's website.

Table 2: Respondent Burdens for Producing Rule 605 Reports

Respondent Type	Number of Respondents	Burden Type	Burden per Respondent (Hours)	Number of Responses per Year	Total Burden Hours (Number of Respondents x Burden per Respondent)[a]
OTC Market Makers	91	Initial	50		4,550
		Annual	11	12	12,012
Exchange Market Makers	87	Initial	50		4,350
		Annual	11	12	11,484
Exchanges	16	Initial	50		800
		Annual	11	12	2,112
Associations	1	Initial	50		50
		Annual	11	12	132
ATSs	33	Initial	50		1,650
		Annual	11	12	4,356
Totals for Current Respondents	**228**	**Initial**	**50**		**11,400**
		Annual	**11**	**12**	**30,096**
Broker-Dealers with ≥100,000 customer accounts	85	Initial	100		8,500
		Annual	11	12	11,220
Non-market center broker-dealers	20	Initial	100		2,000
		Annual	11	12	2,640
SDPs	10	Initial	100		1,000
		Annual	11	12	1,320
Total Burden for New Respondents	**115**	**Initial**	**100**		**11,500**
		Annual	**11**	**12**	**15,180**

[a] In the case of annual burdens, the Total Burden Hours is equal to the burden per respondent multiplied by the number of responses per year.

[956] The Commission estimates the monetized annual burden for this requirement to be $5,939,520. The Commission derived this estimate based on per hour figure from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead: [((Compliance Attorney at $440 for 6 hours) + (Compliance Manager at $373 for 2 hours) + (Programmer at $301 for 2 hours) + (Systems Analyst at $316 for 1 hour)) × 12 reports per year] = $51,648 per respondent for a total annual monetized burden of $5,939,520 ($51,648 × 115 respondents).

The Commission estimates that in lieu of preparing both summary and detailed monthly reports in-house, an individual respondent could retain a service provider to prepare its monthly reports for between approximately $3,000 and $3,500 per month or approximately $36,000 to $42,000 per year.[957] This per-respondent estimate is based on the rate that a reporting entity could expect to obtain if it negotiated on an individual basis. Based on the $3,000 to $3,500 estimate, the monthly cost to the 343 respondents to retain service providers to prepare reports will be between approximately $1,029,000 and $1,200,500 ((343 × $3,000) and (343 × $3,500), respectively), or a total annual cost of between approximately $12,348,000 and $14,406,000 (($1,029,000 × 12) and ($1,200,500 × 12), respectively).

Finally, the 16 national securities exchanges and 1 national securities association will need to amend the Rule 605 NMS Plan to account for the new data fields required to be reported and to include references to larger broker-dealers in addition to market centers. The Commission is modifying the estimates for the initial burden and costs to the SROs to file the amendment to eliminate the per respondent burden for each SRO and instead estimate the burden for the SROs collectively because the respondents would file this amendment jointly, rather than individually, in connection with their status as participants in the effective national market system plan.[958] The Commission estimates that there will be a one-time (or initial) burden of 85 hours [959] to amend the Rule 605 NMS Plan to account for the new reporting fields and reporting parties. The Commission does not estimate that there will be any ongoing annual burden associated with the Rule 605 NMS Plan amendment to account for the new reporting fields and reporting parties. The Commission has based its estimate of SRO burden hours to amend the Rule 605 NMS Plan on the burden hours for existing NMS plans, while also taking into account the limited nature of the updates to the Rule 605 NMS Plan that will be required under the amendments to Rule 605.

The Commission estimates that there will be outsourcing of legal time to develop and draft the Rule 605 NMS Plan amendment in order to account for additional data fields and reporting parties. The Rule 605 NMS Plan amendment will be an update to the list of formats and fields to track the data elements set forth in the Rule and add references to broker-dealers subject to the Rule, and therefore the Commission estimates the hours necessary to develop and draft the amendment will be significantly lower than other recent NMS plan amendments. The Commission estimates that the plan participants will outsource 34 hours of legal time to prepare and file an amendment to the Rule 605 NMS Plan, at an average hourly rate of $575.[960] The Commission estimates that the aggregate one-time reporting burden for preparing and filing an amendment to the Rule 605 NMS Plan will be approximately $19,550 in external costs from outsourced legal work [(at $575 for 34 hours = $19,550)].

The Commission currently estimates a total initial burden of 23,019 hours for all respondents and a total annual burden of 45,276 hours for all respondents.[961]

IX. Economic Analysis

A. Introduction

The Commission is mindful of the economic effects that may result from these amendments to Rule 605, including the benefits, costs, and the effects on efficiency, competition, and capital formation.[962] The following economic analysis identifies and considers the costs and benefits—including the effects on efficiency, competition, and capital formation—that could result from these amendments to Rule 605.

In 2000, when the Commission adopted Rule 11Ac1–5, which was later redesignated as Rule 605, it stated that the rule should facilitate comparisons across market centers and provoke more vigorous competition on execution quality and broker-dealer order routing performance.[963] However, under prior Rule 605 reporting requirements, market participants have not been able to observe the variations across broker-dealers in terms of the execution quality achieved by their order routing services using standardized and publicly available execution quality reports. Furthermore, in the subsequent decades, substantial changes in equity markets, including increases in trading speeds and fragmentation, have made it so that Rule 605 reports have become less informative than they were when Rule 605 was adopted. These amendments to Rule 605, including expanding the scope of reporting entities, modernizing the content of Rule 605 reports, and broadening the reports' accessibility, will increase the relevance and use of the information contained in the reports, and promote competition among market centers and broker-dealers. This increase in competition is expected to ultimately lead to improved execution quality for investors.

The Commission recognizes that these amendments to Rule 605 will entail additional costs to market centers and broker-dealers of disclosing the required

[957] This estimate is the same as the Commission's estimate in the Proposing Release. The Commission's currently approved PRA for prior Rule 605 estimates that the retention of a service provider to prepare a monthly report would cost $2,978 per month, or approximately $35,736 per year. Although the individual line items required by Rule 605, as amended, are different than prior Rule 605 or proposed Rule 605, the Commission does not believe that the overall cost of creating the required reports will differ substantially from these estimates. The Commission received no comments regarding its estimate of the external cost to retain a service provider. As discussed above, a commenter stated that the Commission underestimated annual compliance costs in the Proposing Release because the Commission's estimate of up to $42,000 per year in annual costs failed to account for staff time and other ongoing compliance costs. *See supra* note 950. In response to comments, the Commission increased its annual burden estimate. *See supra* notes 952 and 956.

[958] Although the Commission is now estimating the collective burden for the SROs to make the necessary amendments to the Rule 605 NMS Plan, the Commission's estimate of total initial burden hours and external costs remains consistent with the estimate in the Proposing Release. The Commission did not receive any comment on these burden hour estimates and external cost estimates.

[959] The Commission estimates the monetized initial burden for this requirement to be $43,605. The Commission derived this estimate based on per hour figure from SIFMA's Management & Professional Earnings in the Securities Industry 2013, modified by Commission staff to account for an 1,800-hour work-year and inflation, and multiplied by 5.35 to account for bonuses, firm size, employee benefits and overhead: [(Attorney at $501 for 68 hours) + (Assistant General Counsel at $561 for 17 hours)] = a total initial monetized burden of $43,605.

[960] The Commission's estimates of the relevant wage rates for outside legal services take into account staff experience, a variety of sources including general information websites, and adjustments for inflation.

[961] (11,400 + 11,500 + 119) = 23,019 initial burden hours. (24,624 + 12,420) = 37,044 annual burden hours. The Commission estimates the monetized initial burden for all respondents to be $9,257,505 ($4,577,100 + $4,617,250 + $63,155) and the monetized annual burden for all respondents to be $17,715,266 ($11,775,744 + $5,939,520).

[962] Exchange Act section 3(f) requires the Commission, when it is engaged in rulemaking pursuant to the Exchange Act, and is required to consider or determine whether an action is necessary or appropriate in the public interest, to consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation. *See* 15 U.S.C. 78c(f). In addition, Exchange Act section 23(a)(2) requires the Commission, when making rules pursuant to the Exchange Act, to consider, among other matters, the impact that any such rule will have on competition, and not to adopt any rule that would impose a burden on competition that is not necessary or appropriate in furtherance of the purposes of the Exchange Act. *See* 15 U.S.C. 78w(a)(2).

[963] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75417 (Dec. 1, 2000).

execution quality information. Market centers will face initial compliance costs when updating their methods for preparing Rule 605 reports, and broker-dealers that were not required to publish Rule 605 reports prior to these amendments will face initial compliance costs, including, but not limited to, developing the systems and processes and organizing the resources necessary to generate the reports pursuant to Rule 605, and ongoing compliance costs to publish Rule 605 reports each month.

The Commission has considered and is describing the economic effects of these amendments to Rule 605 and wherever possible has quantified the likely economic effects of these amendments. The Commission has incorporated data and other information, such as academic literature, to assist in the analysis of the economic effects of these amendments. However, because the Commission does not have, and in certain cases does not believe that it reasonably can obtain, data that may inform on certain economic effects, the Commission is unable to quantify those economic effects. Further, even in cases where the Commission has some data, the number and type of assumptions necessary to quantify certain economic effects would render any such quantification unreliable. Our inability to quantify certain costs, benefits, and effects does not imply that such costs, benefits, or effects are less significant.

B. Market Failure

The information disclosed under Rule 605 has provided significant insight into execution quality at different market centers.[964] However, the utility of some of the metrics in Rule 605 reports has eroded because such metrics have not kept up with the substantial changes in equity markets since the initial adoption of Rule 605's predecessor in 2000.[965] As a result, Rule 605 is less able to address the market failures identified in the Rule 11Ac1–5 Adopting Release, including market centers' limited incentives to produce publicly available, standardized execution quality reports.[966] While some metrics remain robust, particular metrics required to be reported by Rule 605 prior to these amendments have become less useful for comparing execution quality across market centers than they were when the predecessor of Rule 605 was initially adopted. Further, some metrics that will be useful in today's market were not required to be reported prior to these amendments. These market changes have limited the degree to which the metrics reported under prior Rule 605 promoted competition among market centers and improved execution quality.[967] To enhance the value of Rule 605 reports, the Commission is updating the disclosure of order execution information and expanding the scope of reporting entities under Rule 605, which will result in a variety of improvements to market participants' access to information about execution quality.

The Commission does not believe that improvements to the preexisting Rule 605 metrics are likely to be achieved through a market-based solution.[968] Even if all market centers were incentivized to voluntarily produce updated statistics for competitive or reputational reasons (*e.g.,* they may lose business if their competitors provide reports and they do not), under current rules, there is little incentive for all market centers to agree on a standardized set of updated statistics. For example, market centers may be incentivized to design ad hoc reports to highlight areas where they believe they compare well to their competitors. Without a standardized set of statistics, it would be difficult for market participants to easily compare execution quality across market centers.

Furthermore, it may be difficult for certain market participants to compute accurate and relevant execution quality metrics from data sources other than Rule 605 reports, due to the lack of granularity and significant time delay of many other publicly available datasets, which can lead to imprecise or stale measures. This limits certain market participants' ability to conduct analyses that examine and compare execution quality across market centers to inform investors. Moreover, even if execution quality information were voluntarily reported by market centers, there may also be limits to market participants' incentives to access it. For example, even if a subset of market centers is able to coordinate on and produce a standardized set of voluntary execution quality metrics, the ability of market participants to use this measure to make comparisons across reporting entities would depend on the subset of reporting entities that choose to report it. If this subset is not of a significant enough size, there may be few incentives for market participants to access the information.[969] Therefore, this rulemaking to modernize the information required to be reported by all Rule 605 reporting entities will prove beneficial.[970]

[964] *See supra* note 17.

[965] In 2018, while amending Rule 606, the Commission also modified Rule 605 to require that the public order execution quality report be kept publicly available for a period of three years but did not change the content of the reports. *See supra* note 45 and corresponding text.

[966] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75414–15 (Dec. 1, 2000).

[967] Several commenters stated that there are limitations to preexisting Rule 605 in light of significant market changes since 2000. *See, e.g.,* Vanguard Letter at 3 (stating that ''though [Rule 605] provides a helpful baseline level of disclosure, it predates Regulation NMS and has not kept pace with advancements in technology and changes in market behavior''); Healthy Markets Letter at 16 (stating that ''[t]he metrics [in Rule 605]—which are decades-old—are wildly outdated''); Better Markets Letter at 1 (stating that ''[Rule 605] has fallen well behind the dramatic changes in the structure of the markets and the advances in technology''); McHenry et al. Letter at 3 (stating that ''our equity markets have changed dramatically since Rule 605 was adopted in 2000 . . . the data reported under Rule 605 no longer provides an accurate measure of execution quality, particularly price improvement, for retail investors''). In addition, one commenter stated that Rule 605 reports are ''incomplete'' and stated that they ''present an inaccurate picture of execution quality.'' Virtu Letter II at 1–2. One commenter believes that ''the current execution quality reports deliver sufficient comparative information on execution quality.'' TradeStation Letter at 6. For the reasons discussed throughout this release, in this section and in section IX.D.1, the Commission believes that there are currently limits to the usefulness of Rule 605 for market participants, and that market participants will benefit from these updates to Rule 605.

[968] In the Rule 11Ac1–5 Adopting Release, the Commission stated that, while some market centers may have voluntarily made order execution information privately available to independent companies or broker-dealers, the information in these reports generally had not been publicly disseminated. To the extent such information had been made available, not all of it was useful or in a form that would allow for cross-market comparisons. *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75431 (Dec. 1, 2000).

[969] For example, in 2015, a working group associated with the Financial Information Forum developed a standardized template that firms may use when publicly disclosing summary information about execution quality for retail investor orders in exchange-listed stocks (''FIF Template''). *See Retail Execution Quality Statistics,* Fin. Info. F., *available at https://fif.com/tools/retail-execution-quality-statistics.* While the FIF Template represents a standardized set of execution quality statistics, only one wholesaler currently produces reports using the FIF Template. *See also infra* notes 1084–1085 and accompanying text (discussing the limited number of firms that have produced reports utilizing the FIF Template at various points in time). While it is unclear whether the lack of widespread uptake of the FIF Template was due to a lack of incentives for reporting entities to report or due to a lack of consumption by market participants, in either case these market failures are addressed by the current amendments to Rule 605, which require updates to the information reported under Rule 605 by all reporting entities. The amendments additionally increase the usefulness and accessibility of Rule 605 reports by expanding the scope of reporting entities to include larger broker-dealers, and by requiring summary execution quality reports.

[970] *See supra* section III describing the amendments modifying the scope of orders covered and information required to be disclosed pursuant to Rule 605.

In addition to modernizing the content of Rule 605, expanding the scope of entities that will be required to prepare Rule 605 reports to include larger broker-dealers will result in benefits that are unlikely to be achieved absent the amendments.[971] Broker-dealers and their customers are subject to a classic principal-agent relationship in which the customer (the principal) submits an order to a broker-dealer (the agent) to handle its execution on the customer's behalf; however, information asymmetries prevent the customer from being able to directly observe the broker-dealer's handling of the customer's order.[972] This limits the extent to which broker-dealers need to compete for customers or order flows on the basis of execution quality, which may result in lower execution quality for their customers.

As with market centers, most broker-dealers also do not necessarily have incentives to produce public and standardized execution quality reports and, therefore, are subject to the same market failures identified in the Rule 11Ac1–5 Adopting Release and described above. Furthermore, as discussed above in the context of market centers, even if broker-dealers are incentivized to produce execution quality reports, for example for marketing purposes or to protect against reputation loss, there are few incentives for broker-dealers to provide execution quality information that is standardized.[973] As a result, individual investors and, to some extent, institutional investors,[974] have limited access to standardized information that could be used to compare how execution quality varies across broker-dealers.[975] Without standardized reporting requirements, broker-dealers may provide their customers with different metrics, such that customers would not be able to make comparisons among broker-dealers on the basis of execution quality. Additionally, even if broker-dealers provide their customers with the same metrics, they may use different methodologies to calculate these metrics, such that they would not be easily comparable. Both of these factors would limit customers' abilities to compare execution quality across broker-dealers.

One commenter stated that vendors could provide a market-based solution for producing comprehensive metrics and could compete for business.[976] The Commission disagrees that a vendor-based market solution would achieve the same benefits as these amendments to Rule 605. Vendors would not have access to information that is granular enough to produce execution quality metrics similar to the ones required by Rule 605 reporting requirements without getting data from market centers and broker-dealers. As discussed above, market centers and broker-dealers do not necessarily have incentives to provide public and standardized execution quality information, and those who choose not to contribute data may do so because they believe it is in their interest to keep their data out of public view.[977] This makes it unlikely that a commercial data vendor will be able to produce an execution quality data product that is comprehensive and free from selection biases.[978] Absent a requirement for reporting entities to publish standardized execution quality reports, competing vendors would likely have incomplete data or produce non-standardized metrics while market centers and broker-dealers might select the vendors that make them look the best. As a result, this market-based solution would be less valuable for comparing execution quality across market centers and broker-dealers. Furthermore, while competing vendors would likely be able to offer a data product summarizing the information contained in Rule 605 reports, it is not necessarily the case that these summary reports would be ''free and readily accessible to the public,'' as required by the amended rule.[979]

C. Baseline

The baseline is the status quo against which the costs, benefits, and the effects on efficiency, competition, and capital formation of these amendments are measured. This baseline consists, first, of the regulatory baseline, which frames both investors' access to execution quality information under Rule 606 and preexisting Rule 605 and market participants' access to market data, both currently and as expected under the

[971] A ''larger broker-dealer'' is a broker-dealer that meets or exceeds the ''customer account threshold,'' as defined in final 17 CFR 242.605(a)(7). *See supra* note 61; *see also supra* section II.A (describing the amendments expanding the scope of Rule 605 reporting entities to include larger broker-dealers).

[972] Similar information asymmetries were recognized in the Rule 11Ac1–5 Adopting Release, which stated that ''the decision about where to route a customer order is frequently made by the broker-dealer, and broker-dealers may make that decision, at least in part, on the basis of factors that are unknown to their customers.'' Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75433 (Dec. 1, 2000).

[973] *See, e.g., supra* note 969 for a discussion of the FIF Template. There are also some broker-dealers that disclose their own execution quality metrics on their respective websites, but the disclosures tend to differ in ways that make them difficult to compare, *e.g.,* reporting different metrics, using different methodologies, or different samples of stocks. *See also Order Execution Quality,* TD Ameritrade, *available at https://www.tdameritrade.com/tools-and-platforms/order-execution.html* (last updated 2024); *Execution Quality,* E*TRADE, *available at https://us.etrade.com/trade/execution-quality* (last updated 2024); *Our Execution Quality,* Robinhood, *available at https://robinhood.com/us/en/about-us/our-execution-quality/* (last updated 2024). Several commenters stated that the execution quality metrics produced by broker-dealers are ''not universal'' (*see* Vanguard Letter at 4) and ''haphazard and generally not comparable across brokers'' (*see* Professor Schwarz et al. Letter at 3).

[974] While some institutional investors are likely to have access to alternative sources of execution quality information, such as Rule 606(b)(3) reports and transaction cost analysis, the information on execution quality that is individually collected by institutional investors is typically nonpublic and highly individualized, and therefore limited to the execution quality obtained from broker-dealers with which the institutional investors currently do business. Since Rule 605 reports are public, institutional investors can use these reports to assess the execution quality of the broker-dealers and market centers with which they do not currently do business. *See infra* section IX.C.2.c) for further discussion.

[975] Institutional and individual investor customers of broker-dealers may differ in their abilities to request execution quality information from their broker-dealers. *See infra* sections IX.C.2.b) and IX.C.2.c) for further discussion.

[976] *See* Data Boiler Letter at 5 and 18.

[977] Even if there are reputational reasons for a reporting entity to provide its execution quality data to a vendor, for example, because a decision not to report would serve as a signal of poor execution quality, the relevance of this as an incentive to report depends on whether market participants are incentivized to access the information in the first place. The benefits to market participants from accessing execution quality information, and therefore their incentives to do so, are limited if the execution quality information only contains a limited subset of reporting entities. *See, e.g.,* the discussion of the limited uptake of the FIF Template in note 969, *supra,* and corresponding text. In theory, this could result in multiple equilibria, in which either all market participants are incentivized to access execution quality data and all reporting entities are incentivized to report, or no market participants are incentivized to access execution quality data and no reporting entities are incentivized to report. Since the benefits from execution quality transparency are diffused across many market participants, while the costs of reporting are concentrated among a smaller subset of entities, it is likely that the cost effect will dominate, such that the latter equilibrium is more likely. The latter equilibrium is also similar to what was observed with the limited uptake of the FIF Template. *See supra* note 969.

[978] Market participants that voluntarily contribute data to commercial datasets ''self-select'' the data that they would like to be included in the dataset. It is widely acknowledged in the empirical economics literature that the practice of having entities under study self-select into the dataset very likely leads to biased data. *See, e.g.,* James J. Heckman, *Selection Bias and Self-Selection, in* Econometrics 201–224 (John Eatwell, et al., eds., Palgrave Macmillan 1990).

[979] For example, while it is likely that data vendors would make summary reports available for a fee, final 17 CFR 242.605(a)(5) requires that reporting entities keep the required summary execution quality reports ''posted on an internet website that is free and readily accessible to the public for a period of three years from the initial date of posting on the internet website.''

unimplemented MDI Rules.[980] The regulatory baseline also consists of other recently adopted rules. In addition, the baseline consists of the usage of preexisting Rule 605 execution quality information by market participants. Next, the baseline discusses issues with market participants' ability to use preexisting Rule 605 information to evaluate and compare execution quality across reporting entities prior to these amendments. Lastly, this baseline describes the state of the markets for brokerage and trading services and the extent to which Rule 605's ability to promote competition on the basis of execution quality, both among broker-dealers and among market centers, may have been limited prior to these amendments. The economic analysis considers existing regulatory requirements, including recently adopted rules, as part of its economic baseline against which the costs and benefits of the amended rule are measured.[981]

1. Regulatory Baseline

(a) Disclosure Requirements Under Preexisting Rule 605

Rule 605 requires reporting entities to make available, on a monthly basis, standardized information concerning execution quality for covered orders in NMS stocks; prior to these amendments, these reporting entities included only market centers.[982] Aggregated execution quality information on covered orders is reported for each individual security, with the information for each security broken out into multiple order type and size categories.[983] This format allows market participants to partially control for differences in market centers' order flow characteristics when assessing execution quality information, facilitating more apples-to-apples comparisons of execution quality across market centers. This is important because a particular market center's order flow may be made up of a different mixture of securities, order types, and order sizes, which may impact or constrain that market center's overall execution quality.[984] In addition, some of the information required to be reported by Rule 605, such as the realized spread, does not measure execution quality directly but serves the purpose of providing context to execution quality metrics and ascertaining how entities handle orders during different market conditions.[985]

In addition, the execution quality information required by Rule 605 pertains to several different aspects of execution quality, namely, execution prices, execution speeds, and fill rates. Prior to these amendments, this information on execution prices included, for market orders and marketable limit orders, the average effective spread,[986] number of shares executed at prices better than the quote, at the quote, or outside the quote,[987] as well as average dollar amount per share that orders were executed at prices better than the quote or outside the quote.[988] Information on execution speeds included, for all order types, the cumulative number of shares executed within different time-to-execution buckets[989] and, for market and marketable limit orders, the share-weighted average time to execution of orders executed better than the quote, at the quote, or outside the quote.[990] Information that could be used to calculate fill rates included, for all order types, the cumulative number of shares of covered orders, the cumulative number of shares of covered orders executed at the receiving market center, and the cumulative number of shares of covered orders executed at any other venue.[991]

The Rule 605 NMS Plan establishes procedures for market centers to make data available to the public in a uniform, readily accessible, and usable electronic form.[992] The Plan also requires market centers to post their monthly reports on an internet website that is free of charge and readily accessible to the public.[993] Generally, reports are posted on market centers' own websites; however, they may be posted on a third-party vendor site if a market center uses a vendor to prepare its reports.[994] Among other things, the Plan sets forth the file type and structure of the reports and the order and format of fields, yielding reports that are structured and machine-readable.[995]

(b) Disclosure Requirements Under Rule 606

Under Rule 606, broker-dealers are required to identify the venues, including market centers, to which they route customer orders for execution.[996] Specifically, with respect to held orders, Rule 606(a)(1) requires broker-dealers to produce quarterly public reports containing information about the venues to which the broker-dealer regularly routed non-directed orders for execution, including any payment relationship between the broker-dealer and the venue, such as any PFOF

[980] *See* MDI Adopting Release, 86 FR 18596 (Apr. 9, 2021).

[981] *See, e.g., Nasdaq* v. *SEC,* 34 F.4th 1105, 1111–15 (D.C. Cir. 2022). This approach also follows Commission staff guidance on economic analysis for rulemaking. *See* Memorandum from SEC Div. of Risk, Strategy Fin. Innovation & Off. Of Gen. Couns. To Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012), *available at https://www.sec.gov/divisions/riskfin/rsfi_guidance_econ_analy_secrulemaking.pdf* (''The economic consequences of proposed rules (potential costs and benefits including effects on efficiency, competition, and capital formation) should be measured against a baseline, which is the best assessment of how the world would look in the absence of the proposed action.''); *id.* at 7 (''The baseline includes both the economic attributes of the relevant market and the existing regulatory structure.''). The best assessment of how the world would look in the absence of the proposed or final action typically does not include recently proposed actions, because doing so would improperly assume the adoption of those proposed actions.

[982] *See* prior 17 CFR 242.605.

[983] *See* prior 17 CFR 242.605(a)(1). These size categories were: 100 to 499 shares; 500 to 1,999 shares; 2000 to 4,999 shares; and 5,000 or greater shares. *See* prior 17 CFR 242.600(b)(13).

[984] For example, larger order sizes are typically more difficult to ''work'' than smaller order sizes, so the execution quality information of a market center that tends to handle larger order sizes would likely be more constrained than that of a market center that tends to handle smaller order sizes. Several commenters discussed the importance of being able to make apples-to-apples comparisons of execution quality to help ensure that differences in execution quality are not driven by factors such as stock characteristics and different clientele. *See, e.g.,* TradeStation Letter at 7, stating that ''differences [in retail client personas] cause execution quality data to be difficult to compare on an apples-to-apples basis because, for example, trade and execution data generated from buy-and-hold investors' orders differs vastly from the same data generate[d] from active traders' orders;'' and Virtu Letter II at 13, stating that ''[f]actors like the mix of stocks a broker handles and the trading strategies of its customers can make one broker's order flow more costly to fulfill and/or challenging to execute than another's and therefore explain potential differences in execution quality between brokers.''

[985] *See infra* note 1229 and accompanying text for a discussion of realized spread as a measure of market makers' ability to provide liquidity during adverse market conditions.

[986] *See* prior 17 CFR 242.605(a)(1)(ii)(A).

[987] *See* prior 17 CFR 242.605(a)(1)(ii)(B), (C), and (G), respectively.

[988] *See* prior 17 CFR 242.605(a)(1)(ii)(C) and (H), respectively.

[989] Prior to amendment, the time-to-execution categories defined in Rule 605 were shares executed from 0 to 9 seconds, shares executed from 10 to 29 seconds, shares executed from 30 to 59 seconds, shares executed from 60 to 299 seconds, and shares executed from 5 to 30 minutes. *See* prior 17 CFR 242.605(a)(1)(i)(F) through (J).

[990] *See* prior 17 CFR 242.605(a)(1)(ii)(D), (F), and (I), respectively.

[991] *See* prior 17 CFR 242.605(a)(1)(i)(B), (D), and (E). The fill rate can be calculated as Fill Rate = (Cumulative Number of Shares Executed at Receiving Market Center + Cumulative Number of Shares Executed at Other Venues)/(Cumulative Number of Covered Shares).

[992] *See* Rule 605 NMS Plan Release, 66 FR 19814 (Apr. 17, 2001).

[993] *See supra* note 869 for further discussion.

[994] *See* Rule 605 NMS Plan at section VII & n.3.

[995] *See* Rule 605 NMS Plan Release, 66 FR 19814 at 19815 (Apr. 17, 2001) (''Section V . . . provides that market center files must be in standard, pipe-delimited ASCII format'').

[996] *See* 17 CFR 242.606(a)(1).

arrangements.[997] In addition, Rule 606(b)(1) requires broker-dealers to provide to their customers, upon request, reports that include high-level customer-specific order routing information, such as the identity of the venues to which the customer orders were routed for execution in the prior six months and the time of the transactions, if any, that resulted from such orders.[998] For orders submitted on a held basis, the reports required by Rule 606 do not contain any execution quality information.

When the Commission adopted the predecessor to Rule 606, it was intended to supply investors with information on where their orders are routed, which could be used along with information from Rule 605 about the quality of execution from the market centers to which their orders are routed.[999] In theory, investors should be able to use Rule 606 reports to identify the market centers to which their broker-dealers are routing orders, and then use Rule 605 to estimate the execution quality offered by those market centers.[1000] These market centers' aggregated execution quality metrics could then be used as a proxy for the execution quality that broker-dealers achieved for their customers' orders.

Following amendments to Rule 606 in 2018,[1001] broker-dealers are subject to requirements to provide information about the execution quality that they achieved for not held orders, which are typically used by institutional investors.[1002] Specifically, Rule 606(b)(3) requires broker-dealers to produce reports pertaining to order handling upon the request of a customer that places, directly or indirectly, one or more orders in NMS stocks that are submitted on a not held basis, subject to a de minimis exception.[1003] These reports include aggregated execution quality metrics such as fill rate, percentage of shares executed at the midpoint, and percentages of total shares executed that were priced on the side of the spread more favorable to the order and on the side of the spread less favorable to the order.[1004]

(c) Rules Addressing Consolidated Market Data

In 2020, the Commission adopted a new rule and amended existing rules to establish a new infrastructure for consolidated market data,[1005] and the regulatory baseline includes these changes to the current arrangements for consolidated market data. However, as discussed in more detail below, the MDI Rules have not been implemented, and so they have not yet affected market practices. As a result, the data used to measure the baseline below reflects the regulatory structure in place for consolidated market data prior to the implementation of the MDI Rules.

The Commission received comments regarding uncertainty over the market effect of the MDI Rules, once implemented, and how this will affect the baseline assumptions of Rule 605, as amended.[1006] Accordingly, this section will first briefly summarize the regulatory structure for consolidated market data prior to the implementation of the MDI Rules. It then will discuss the current status of the implementation of the MDI Rules and provide an assessment of the potential effects that the implementation of the MDI Rules can have on the baseline estimations.

(1) Regulatory Structure for Consolidated Market Data Prior to the MDI Rules

Consolidated market data are made widely available to investors through the national market system, a system set forth by Congress in section 11A of the Exchange Act[1007] and facilitated by the Commission in Regulation NMS.[1008] Market data are collected by exclusive SIPs,[1009] which consolidate that information and disseminate an NBBO and last sale information. For quotation information, only the 16 national securities exchanges that currently trade NMS stocks provide quotation information to the SIPs for dissemination in consolidated market data.[1010] FINRA has the only SRO display-only facility (the Alternative Display Facility, or ADF). No broker-dealer, however, currently uses it to display quotations in NMS stocks in

[997] *See id.* These reports must provide information, for each venue identified, on the net aggregate amount of any payment for order flow received, payment from any profit-sharing relationship received, transaction fees paid, and transaction rebates received, both as a total dollar amount and per share, for each of the following non-directed order types: (A) market orders; (B) marketable limit orders; (C) non-marketable limit orders; and (D) other others. *See* 17 CFR 242.606(a)(1)(iii).

[998] *See* 17 CFR 242.606(b)(1).

[999] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75435 (Dec. 1, 2000), stating that ''[s]upplied with information on where their orders are routed, as well as information about the quality of execution from the market centers to which their orders are routed, investors will be able to make better informed decisions with respect to their orders.''

[1000] *See infra* section IX.C.3.a)(1) for a discussion of current issues with using information from Rule 606 reports to infer the execution quality of broker-dealers.

[1001] *See generally* 2018 Rule 606 Amendments Release, 83 FR 58338 (Nov. 19, 2018).

[1002] An analysis included in the 2018 Rule 606 Amendments Release looked at orders submitted from customer accounts of 120 randomly selected NMS stocks listed on NYSE during the sample period of Dec. 5, 2016, to Dec. 9, 2016, consisting of 40 large-cap stocks, 40 mid-cap stocks, and 40 small-cap stocks. The analysis found that among the orders received from the institutional accounts, about 69% of total shares and close to 39% of total number of orders in the sample are not held orders, whereas among the orders received from the individual accounts, about 19% of total shares and about 12% of total number of orders in the sample are not held orders. *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58393 (Nov. 19, 2018); *see also id.* at 58345 (stating that by using the not held order distinction, Rule 606(b)(3) as adopted will likely result in more Rule 606(b)(3) disclosures for order flow that is typically characteristic of institutional customers—not retail customers—and will likely cover all or nearly all of the institutional order flow). In contrast, held orders are typically used by individual investors. *See, e.g., id.* at 58372 (stating that retail investors' orders are typically submitted on a held basis and are typically smaller in size).

[1003] *See* 17 CFR 242.606(b)(3). In addition, Rule 606(b)(5)'s customer-level de minimis exception exempts broker-dealers from providing upon request execution quality reports for customers that traded on average each month, for the prior six months, less than $1,000,000 of notional value of not held orders in NMS stocks through the broker-dealer. *See* 17 CFR 242.606(b)(5).

[1004] *See* 17 CFR 242.606(b)(3)(ii).

[1005] *See* MDI Adopting Release, 86 FR 18596 (Apr. 9, 2021).

[1006] *See* Schwab Letter at 2; Tastytrade Letter at 2 & n.1; DOJ Letter at 6–7.

[1007] *See* 15 U.S.C. 78k–1(a)(1)(C).

[1008] 17 CFR 242.600 through 242.614.

[1009] *See* MDI Adopting Release, 86 FR 18596 at 18598–99 (Apr. 9, 2021) (describing that the exclusive SIPs, among other things, disseminate core data, which currently consist of: (1) the price, size, and exchange of the last sale; (2) each exchange's current highest bid and lowest offer and the shares available at those prices; and (3) the NBBO). A securities information processor (''SIP'') is defined in section 3(a)(22)(A) of the Exchange Act. *See* 15 U.S.C. 78c(a)(22)(A). Further, an ''exclusive processor'' (also known as an exclusive SIP) is defined in section 3(a)(22)(B) of the Exchange Act. *See* 15 U.S.C. 78c(a)(22)(B).

[1010] Currently, these national securities exchanges are: Cboe BYX Exchange, Inc. (''Cboe BYX''); Cboe BZX Exchange, Inc. (''Cboe BZX''); Cboe EDGA Exchange, Inc. (''Cboe EDGA''); Cboe EDGX Exchange, Inc. (''Cboe EDGX''); Investors Exchange LLC (''IEX''); Long-Term Stock Exchange, Inc. (''LTSE''); MEMX LLC (''MEMX''); MIAX Pearl, LLC (''MIAX PEARL''); Nasdaq BX, Inc. (''Nasdaq BX''); Nasdaq PHLX LLC (''Nasdaq Phlx''); The Nasdaq Stock Market LLC (''Nasdaq''); NYSE; NYSE American LLC (''NYSE American''); NYSE Arca, Inc. (''NYSE Arca''); NYSE Chicago, Inc. (''NYSE CHX''); and NYSE National, Inc. (''NYSE National''). The Commission approved rules proposed by BOX Exchange LLC (''BOX'') for the listing and trading of certain equity securities that would be NMS stocks on a facility of BOX known as BSTX LLC (''BSTX''), but BSTX is not yet operational. *See* Securities Exchange Act Release No. 94092 (Jan. 27, 2022), 87 FR 5881 (Feb. 2, 2022) (SR–BOX–2021–06) (approving the trading of equity securities on the exchange through a facility of the exchange known as BSTX); Securities Exchange Act Release No. 94278 (Feb. 17, 2022), 87 FR 10401 (Feb. 24, 2022) (SR–BOX–2021–14) (approving the establishment of BSTX as a facility of BOX). BSTX cannot commence operations as a facility of BOX until, among other things, the BSTX Third Amended and Restated Limited Liability Company Agreement approved by the Commission as rules of BOX is adopted. *See id.* at 10407.

consolidated market data.[1011] Disseminated quotation information includes each exchange's current highest bid and lowest offer and the shares available at those prices, as well as the NBBO. For transaction information, currently all national securities exchanges that trade NMS stocks, as well as FINRA, provide real-time transaction information to the SIPs for dissemination in consolidated market data. Such information includes the symbol, price, size, and exchange of the transaction, and it includes odd-lot transactions.

(2) Unimplemented Market Data Infrastructure Rules

Among other things, the unimplemented MDI Rules update and expand the content of consolidated market data to include: (1) certain odd-lot information;[1012] (2) information about certain orders that are outside of an exchange's best bid and best offer (*i.e.,* certain depth of book data);[1013] and (3) information about orders that are participating in opening, closing, and other auctions.[1014] The MDI Rules also introduce a four-tiered definition of round lot that is tied to a stock's average closing price during the previous month.[1015] For stocks with prices greater than $250, a round lot is defined as consisting of between 1 and 40 shares, depending on the tier.[1016] The MDI Rules also introduce a decentralized consolidation model under which competing consolidators, rather than the existing exclusive SIPs, will collect, consolidate, and disseminate certain NMS information.[1017] These competing consolidators are not required to offer a product containing all elements of consolidated market data, but are able to develop the consolidated market data products that their subscribers demand.[1018]

In the MDI Adopting Release, the Commission established a transition period for the implementation of the MDI Rules.[1019] The Commission's approval of such amendments will be the starting point for the rest of the MDI implementation schedule.[1020] After approval of the MDI Plan Amendments, the next step will be a 180-day development period, during which competing consolidators can register with the Commission.[1021] Based on the times provided in the transition plan for implementation of the MDI Rules, the Commission estimated that the full implementation of the MDI Rules will be at least two years after the Commission's approval of the plan amendment(s) required by Rule 614(e).[1022]

The Operating Committees of the CTA/CQ Plan and UTP Plan filed the MDI Plan Amendments on November 5, 2021.[1023] The Commission disapproved the proposed amendments on September 21, 2022.[1024] As a result, the participants to the effective national market system plan(s) will need to develop and file new proposed amendments as required by Rule 614(e), before the implementation period prescribed by the phased transition plan can commence. Because the implementation of the MDI Rules has been delayed, the end date of the implementation period cannot be estimated with greater certainty.

Given that the MDI Rules have not yet been implemented, they have not affected market practice and therefore data that would be required for a quantitative analysis of a baseline that includes the effects of the MDI Rules is not available. It is possible that the baseline (and therefore the economic effects relative to the baseline) could be different once the MDI Rules are implemented. The following discussion reflects the Commission's assessment of the anticipated economic effects of the MDI Rules described in the MDI Adopting Release as they relate to the baseline for the adoption of these amendments.[1025]

The Commission anticipated that the new round lot definition will result in narrower NBBO spreads for most stocks with prices greater than $250 because, for these stocks, fewer odd-lot shares will need to be aggregated together (possibly across multiple price levels[1026]) to form a round lot and qualify for the NBBO.[1027] The reduction in spreads will be greater in higher-priced stocks because the definition of a round lot for these stocks will include fewer shares, such that even fewer odd-lot shares will need to be aggregated together.[1028] This could cause statistics that are measured against the NBBO to change because they will be measured against the new, narrower NBBO. For example, execution quality statistics on price improvement for higher-priced

[1011] On Dec. 16, 2022, FINRA filed with the Commission a proposed rule change to add IntelligentCross ATS as a new entrant to the ADF. On Aug. 24, 2023, the Division of Trading and Markets approved FINRA's proposed rule change pursuant to delegated authority. On Aug. 25, 2023, the Deputy Secretary of the Commission notified FINRA that, pursuant to Commission Rule of Practice 431, the Commission would review the Division of Trading and Markets' action pursuant to delegated authority and that the Division of Trading and Markets' action pursuant to delegated authority was stayed until the Commission orders otherwise. *See* Securities Exchange Act Release No. 96550 (Dec. 20, 2022), 87 FR 79401 (Dec. 27, 2022) (FINRA proposed rule change to add IntelligentCross ATS as a new entrant to the ADF); Securities Exchange Act Release No. 98212 (Aug. 24, 2023), 88 FR 59958 (Aug. 30, 2023) (release approving FINRA's proposal by the Division of Trading and Markets pursuant to delegated authority). Securities Exchange Act Release No. 98642 (Sept. 29, 2023) (Commission order staying the Division of Trading and Markets' approval pursuant to delegated authority until the Commission orders otherwise).

[1012] *See* final 17 CFR 242.600(b)(69); MDI Adopting Release, 86 FR 18596 at 18613 (Apr. 9, 2021).

[1013] *See* MDI Adopting Release, 86 FR 18596 at 18625 (Apr. 9, 2021).

[1014] *See id.* at 18630.

[1015] *See id.* at 18617.

[1016] *See id.* The Commission adopted a four-tiered definition of round lot: 100 shares for stocks priced $250.00 or less per share, 40 shares for stocks priced $250.01 to $1,000.00 per share, 10 shares for stocks priced $1,000.01 to $10,000.00 per share, and 1 share for stocks priced $10,000.01 or more per share.

[1017] *See id.* at 18637.

[1018] *See id.* at 18608, 18671–72.

[1019] *See id.* at 18698–18701.

[1020] *See id.* at 18698.

[1021] *See id.* at 18699–18700.

[1022] *See id.* at 18700–18701; Minimum Pricing Increments Proposing Release, 87 FR 80266 at 80295 (Dec. 29, 2022). The transition time frame includes the implementation of the round lot definition, which is scheduled to occur at the end of the transition plan. The Commission has proposed to accelerate the implementation of the odd-lot information and round lot definition. *See id.* at 80295–99. As this proposal has not been adopted, it is not part of the baseline of the Rule 605 amendments. *See supra* note 981.

[1023] The Operating Committees of CTA Plan and UTP Plan filed proposed amendments on Nov. 5, 2021, which were published for comment in the **Federal Register**. *See* Securities Exchange Act Release Nos. 93615 (Nov. 19, 2021), 86 FR 67800 (Nov. 29, 2021); 93625 (Nov. 19, 2021), 86 FR 67517 (Nov. 26, 2021); 93620 (Nov. 19, 2021), 86 FR 67541 (Nov. 26, 2021); 93618 (Nov. 19, 2021), 86 FR 67562 (Nov. 26, 2021).

[1024] *See* Securities Exchange Act Release Nos. 95848 (Sept. 21, 2022), 87 FR 58544 (Sept. 27, 2022); 95849 (Sept. 21, 2022), 87 FR 58592 (Sept. 27, 2022); 95850 (Sept. 21, 2022), 87 FR 58560 (Sept. 27, 2022); 95851 (Sept. 21, 2022), 87 FR 58613 (Sept. 27, 2022).

[1025] *See* MDI Adopting Release, 86 FR 18596 at 18741–18799 (Apr. 9, 2021).

[1026] The calculation of the NBBO includes odd-lots that, when aggregated, are equal to or greater than a round lot. Under final 17 CFR 242.600(b)(26)(ii), ''such aggregation shall occur across multiple prices and shall be disseminated at the least aggressive price of all such aggregated odd-lots.'' For example, if there is one 50-share bid at $25.10, one 50-share bid at $25.09, and two 50-share bids at $25.08, the odd-lot aggregation method would show a protected 100-share bid at $25.09.

[1027] For example, if there is one 20-share bid at $250.10, one 20-share bid at $250.09, and two 50-share bids at $250.08, prior to MDI the NBB would be $250.08, as even aggregated together the odd-lot volume would not add up to at least a round lot. After MDI, the NBB would be $25.09, as the odd-lot aggregation method would show a protected 40-share round lot bid at $25.09.

[1028] *See supra* note 1026. An analysis in the MDI Adopting Release showed that the new round lot definition caused a quote to be displayed that improved on the current round lot quote 26.6% of the time for stocks with prices between $250.01 and $1,000, and 47.7% of the time for stocks with prices between $1,000.01 and $10,000. *See* MDI Adopting Release, 86 FR 18596 at 18743 (Apr. 9, 2021).

stocks may show a reduction in the number of shares of marketable orders that received price improvement because price improvement will be measured against a narrower NBBO. In addition, the Commission anticipated that the NBBO midpoint in stocks priced higher than $250 could be different under the MDI Rules than it otherwise would be, resulting in changes in the estimates for statistics calculated using the NBBO midpoint, such as effective spreads. In particular, at times when bid odd-lot quotations exist within the current NBBO but no odd-lot offer quotations exist (and vice versa), the midpoint of the NBBO resulting from the rule will be higher than the current NBBO midpoint.[1029] More broadly, the Commission anticipated that the adopted rules will have these effects whenever the new round lot bids do not exactly balance the new round lot offers. However, the Commission stated that it does not know to what extent or in which direction such odd-lot imbalances in higher priced stocks currently exist, so it is uncertain of the extent or direction of the change.[1030]

The Commission also anticipated that the MDI Rules could result in a smaller number of shares at the NBBO for most stocks in higher-priced round lot tiers.[1031] To the extent that this occurs, there could be an increase in the frequency with which marketable orders must walk the book to execute. This would affect statistics that are calculated using consolidated depth information, such as measures meant to capture information about whether orders received an execution of more than the displayed size at the quote, *i.e.,* ''size improvement.''

The new round lot definition will result in fewer odd-lot orders in stocks with prices greater than $250, as some orders that were defined as odd-lots prior to the MDI Rules are now defined as round lots. At the same time, the MDI Rules may also result in a higher number of odd-lot trades, as the inclusion of odd-lot quotes that may be priced better than the current NBBO in consolidated market data may attract more trading interest from market participants that did not have access to this information prior to the MDI Rules.[1032] However, the magnitude of this effect depends on the extent to which market participants who rely solely on SIP data and lack information on odd-lot quotes choose to receive the odd-lot information and trade on it. The Commission states in the MDI Adopting Release that it believes it is not possible to observe this willingness to trade with existing market data.[1033]

The MDI Rules may have implications for broker-dealers' order routing practices. For those market participants that rely solely on SIP data for their routing decisions and that choose to receive the expanded set of consolidated market data, the Commission anticipated that the additional information contained in consolidated market data will allow them to make more informed order routing decisions. This in turn would help facilitate best execution, which would reduce transaction costs and increase execution quality.[1034] Broker-dealers may choose to receive market data from competing consolidators, who may offer different consolidated market data products at different prices or at different latencies or with different amounts of data content.[1035] Competing consolidators will be required to disclose information about their consolidated market data products, including the services they will offer, the prices for such services as well as performance metrics, which will assist a broker-dealer in selecting an appropriate competing consolidator.[1036] The Commission states in the MDI Adopting Release that it believes that competition among consolidators will support high quality consolidated market data.[1037] Furthermore, while competing consolidators are not required to offer a product containing all elements of consolidated market data, the Commission states that it believes that one or more competing consolidators will be incentivized to offer a consolidated market product containing all of the data elements.[1038]

The MDI Rules may also result in differences in the baseline competitive standing among different trading venues, for several reasons. First, for stocks with prices greater than $250, the Commission anticipated that the new definition of round lots may affect order flows as market participants who rely on consolidated data will be aware of quotes at better prices that are currently in odd-lot sizes, and these may not be on the same trading venues as the one that has the best 100 share quote.[1039] Similarly, it anticipated that adding information on odd-lot quotes priced at or better than the NBBO to expanded core data may cause changes to order flow as market participants take advantage of newly visible quotes.[1040] However, the Commission stated that it was uncertain about the magnitude of both of these effects.[1041] To the extent that it occurs, a change in the flow of orders across trading venues may result in differences in the competitive baseline in the market for trading services.

Second, national securities exchanges and ATSs have a number of order types that are based on the NBBO, and so the Commission anticipated that the changes in the NBBO caused by the new round lot definitions may affect how these order types perform and could also affect other orders with which they interact.[1042] The Commission stated that these interactions may affect relative order execution quality among different trading platforms, which may in turn affect the competitive standing among different trading venues, with trading venues that experience an improvement/decline in execution quality attracting/losing order flow.[1043] However, the Commission stated that it was uncertain of the magnitude of these effects.[1044]

Third, the Commission anticipated that, as the NBBO narrows for securities in the smaller round lot tiers, it may become more difficult for the retail execution business of wholesalers to provide price improvement and other execution quality metrics at levels similar to those provided under a 100 share round lot definition.[1045] To the extent that wholesalers are held to the same price improvement standards by retail brokers in a narrower spread environment, the wholesalers' profits from executing individual investor orders might decline,[1046] and to make

[1029] For example, if the NBB is $260 and the NBO is $260.10, the NBBO midpoint is $260.05. Under the adopted rules a 40-share buy quotation at $260.02 will increase the NBBO midpoint to $260.06. Using this new midpoint, calculations of effective spread will be lower for buy orders but higher for sell orders.

[1030] *See* MDI Adopting Release, 86 FR 18596 at 18750 (Apr. 9, 2021).

[1031] However, this effect will depend on how market participants adjust their order submissions. *See id.* at 18746 for further discussion.

[1032] *See id.* at 18754.

[1033] *See id.*

[1034] *See id.* at 18725.

[1035] *See id.* at 18606.

[1036] *See id.*

[1037] *See id.* at 18661.

[1038] *See id.* at 18752.

[1039] *See id.* at 18744.

[1040] *See id.* at 18596, 18754.

[1041] *See id.* at 18745, 18754.

[1042] *See id.* at 18748.

[1043] *See id.*

[1044] *See id.*

[1045] *See id.* at 18747.

[1046] Individual investor orders typically feature lower adverse selection than other types of orders, such as institutional orders. All else equal, it is generally more profitable for any liquidity provider, including wholesalers, to execute against orders with lower adverse selection risk, due to the reduced risk that prices will move against the liquidity provider. *See, e.g.,* David Easley, Nicholas M. Kiefer & Maureen O'Hara, *Cream-Skimming or*

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up for lower revenue per order filled in a narrower spread environment, wholesalers may respond by changing how they conduct their business in a way that may affect retail brokers. However, the Commission stated that it was uncertain as to how wholesalers may respond to the change in the round lot definition, and, in turn, how retail brokers may respond to those changes, and so was uncertain as to the extent of these effects.[1047] If wholesalers do change how they conduct business, it may impact wholesalers' competitive standing in terms of the execution quality offered, particularly to individual investor orders.

Where implementation of the above-described MDI Rules may affect certain numbers in the baseline, the description of the baseline below notes those effects.

(d) Other Recently Adopted/Proposed Rules

Several commenters requested that the Commission consider interactions between the economic effects of the proposal to amend Rule 605 and other recent Commission proposals.[1048] In addition to interaction between this rulemaking and the MDI Adopting Release, discussed *supra,* commenters stated that there could be interactions between this rulemaking and another proposal [1049] that has since been adopted, the Settlement Cycle Adopting Release,[1050] which affects the same market participants as the amendments to Rule 605. Commenters stated that implementing the rules together would impact industry resources, or that the rules had uncertain interacting effects.[1051] This rule was not included as part of the baseline in the Proposing Release because it was not adopted at the time of the Proposing Release. In response to commenters, this economic analysis considers potential economic effects arising from any overlap between the compliance period for the final amendments and that of the Settlement Cycle Adopting Release.[1052]

In addition, commenters stated that there were overlapping compliance costs between the final amendments and the proposals that have not been adopted: in particular, the Order Competition Rule Proposing Release, the Regulation Best Execution Proposing Release, and the Minimum Pricing Increments Proposing Release.[1053] Numerous commenters accordingly recommended an incremental or sequential approach to the Commission's market structure proposals.[1054] To the extent the Commission takes final action on any or all of those proposals, the baseline in each of those subsequent rulemakings will reflect the existing regulatory requirements at that time.

In a related comment, one commenter stated that the other market structure proposals should be delayed for a period sufficient to analyze the metrics under the amended Rule 605 reporting requirements, to establish an updated baseline for the other rules' benefits and costs and—if the other rules are adopted—to accurately measure their impact.[1055] This comment pertains to the timing of adoption and baseline assumptions of the other market structure proposals and will be considered in connection with those proposals.

2. Use of Reports Under Rule 605 Prior to Rule Amendments

(a) Relevance of Execution Quality Information

When a customer places an order in an NMS stock with a broker-dealer, the broker-dealer acts as an agent on behalf of that customer, to whom the broker-dealer owes a duty of best execution.[1056] These broker-dealers can generally decide how to route that order for execution to an exchange, a wholesaler, or an ATS, where the trade may be executed or potentially routed further. These market centers, among other things, match traders with counterparties, provide a framework for price negotiation and provide liquidity to those seeking to trade. In this way, individual and institutional investors are subject to a principal-agent relationship in which an order submitter (the principal) submits an order to an agent to handle on its behalf, in this case the broker-dealer. Since information asymmetries prevent the principal from being able to directly observe the agent's handling of the order, this creates possible conflicts of interest in which the agent's incentives may not align with the interests of the

Profit-Sharing? The Curious Role of Purchased Order Flow, 51 J. Fin. 811 (1996).

[1047] *See* MDI Adopting Release, 86 FR 18596 at 18748 (Apr. 9, 2021).

[1048] *See, e.g.,* Nasdaq Letter at 6 (''the Commission must be careful to consider both the individual and combined effects of its Proposals''); SIFMA AMG Letter at 4 (''the cumulative effects of multiple, major changes to the market structure necessarily compound, making the need for careful analysis of their intersections indispensable'').

[1049] Securities Exchange Act Release No. 94196 (Feb. 9, 2022), 87 FR 10436 (Feb. 24, 2022) (Shortening the Securities Transaction Settlement Cycle).

[1050] Securities Exchange Act Release No. 96930 (Feb. 15, 2023), 88 FR 13872 (Mar. 6, 2023) (Shortening the Securities Transaction Settlement Cycle) (''Settlement Cycle Adopting Release''). The Settlement Cycle Adopting Release shortens the standard settlement cycle for most broker-dealer transactions from two business days after the trade date to one business day after the trade date (''T+1''). To facilitate orderly transition to a shorter settlement cycle, the rule requires same-day confirmations, allocations, and affirmations for processing transactions subject to the rule, and requires records of each confirmation received, and of any allocation and each affirmation sent or received, with a date and time stamp for each indicating when it was sent or received. With certain exceptions, the rule has a compliance date of May 28, 2024. *See* Settlement Cycle Adopting Release, 88 FR 13872 at 13918, section VII (Mar. 6, 2023).

[1051] *See* SIFMA AMG Letter at 3; Chamber of Commerce Letter at 3; Fidelity Letter at 4, n.4; BlackRock Letter at 17; Rebekah Goshorn Jurata, General Counsel, American Investment Council, at 9, n.30 (Aug. 8, 2023), *available at https://www.sec.gov/comments/s7-29-22/s72922-245802-509962.pdf* (''American Investment Council'').

[1052] Since proposing this rule, the Commission adopted Securities Exchange Act Release No. 99477 (Feb. 6, 2024) (Further Definition of ''As a Part of a Regular Business'' in the Definition of Dealer and Government Securities Dealer) (''Dealer Definition Amending Release''). Commenters identified the proposed rule as having interacting effects with Rule 605. *See* Chamber of Commerce Letter at 3; Fidelity Letter at 4, n.4; BlackRock Letter at 2 & n.6, 17 (*citing* Securities Exchange Act Release No. 94524 (Mar. 28, 2022), 87 FR 23054 (Apr. 18, 2022)). The Dealer Definition Amending Release adopts new rules to further define the phrase ''as a part of a regular business'' as used in the statutory definitions of ''dealer'' and ''government securities dealer.'' The Commission believes there are no potential significant effects from overlapping requirements to comply with the amendments to Rule 605. Under Rule 605(a)(7), as adopted, a broker-dealer which is not a market center is subject to the final rule only if it ''introduces or carries 100,000 or more customer accounts through which transactions are effected for the purchase or sale of NMS stocks.'' By contrast, under the Dealer Definition Amending Release, the affected parties are liquidity providers that introduce or carry no customer accounts, that will be required to register as dealers. As a result, the Commission does not anticipate the compliance costs associated with these amendments to Rule 605 to be incurred directly by those who are impacted by the Dealer Definition Amending Release.

[1053] *See, e.g.,* SIFMA Letter II, at 2–3, 8–9, 11–13, 16–21 & app. E. In addition to the three other market structure proposals, commenters also stated interacting effects with another proposal that has not yet been adopted, Securities Exchange Act Release No. 94062 (Jan. 26, 2022), 87 FR 15496 (Mar. 18, 2022) (Amendments Regarding the Definition of ''Exchange'' and Alternative Trading Systems (ATSs) That Trade U.S. Treasury and Agency Securities, National Market System (NMS) Stocks, and Other Securities). *See, e.g.,* Chamber of Commerce Letter at 3; Fidelity Letter at 4 nn.4, 10.

[1054] *See, e.g.,* SIFMA AMG Letter at 2, 18; STA Letter at 9–10.

[1055] *See* Rule 605 Citadel Letter at 1–2, 4; *see also* Equity Market Structure Citadel Letter at 15, 21; Equity Market Structure Citadel Letter II at 1–3.

[1056] Some investors may not value order-level execution quality in all cases. For example, it is the Commission's understanding that when an institutional customer submits a large order to be executed on behalf of one account (*e.g.,* a single mutual fund or pension fund), it expects the broker-dealer that handles and executes such large order to do so in a manner that ensures best execution is provided to the ''parent'' order. *See infra* section IX.C.4.a)(1)(b) for further discussion.

principal.[1057] Since the broker-dealers typically do not directly observe market centers' executions of their routed orders,[1058] similar information asymmetries exist between broker-dealers and the market centers to which they route customer orders.

Standardized execution quality information, such as the information available from Rule 605 reports, alleviates these information asymmetries.[1059] First, it provides broker-dealers access to information about the execution quality of market centers, which they can use to inform their routing decisions.[1060] Secondly, in conjunction with broker-dealer routing information from Rule 606 reports,[1061] preexisting Rule 605 allowed investors access to information about the execution quality achieved by the market centers to which their broker-dealers typically route.[1062]

Information on the execution quality obtained by broker-dealers is particularly important for investors. As broker-dealers that route customer orders have many choices about how and where to route orders for execution,[1063] their routing decisions affect the execution quality that their customers' orders receive, leading to significant variations in execution quality across broker-dealers. For example, a broker-dealer may route a marketable IOC order to a market center that is not posting any liquidity at the NBBO (in which case the order would be cancelled), or a broker-dealer may route a NMLO to a market center that is not attracting any trading interest (in which case the NMLO would likely be cancelled at the end of day, if not earlier). The authors of one recent academic working paper ran an experiment in which they placed identical simultaneous market orders across various broker-dealers; they found that the execution quality of these orders differed significantly in terms of average price improvement and effective spreads.[1064] The authors argue that these differences in execution quality across broker-dealers are economically significant, as they estimate that every basis point difference in execution quality is equivalent to an annual cost to investors of $2.8 billion.[1065] The evidence that there are significant differences in execution quality across broker-dealers suggests that without access to standardized information about broker-dealer execution quality, it is difficult for investors to compare these differences when choosing a broker-dealer.

Some information asymmetries are not fully addressed through the use of aggregated execution quality information, such as that available through Rule 605 (both prior to and after these amendments), because the principal is not able to use these data to observe the execution quality that the agent achieved for the principal's individual orders. However, the principal is able to receive a signal of the execution quality that the agent has achieved for comparable orders over a certain time period. This signal can be a useful proxy that investors and their broker-dealers can use to assess and compare the execution quality that they can expect to receive across market centers. Despite being aggregated, Rule 605 reports have indeed been useful. One academic study examining the introduction of Rule 605 found that the routing of marketable order flow by broker-dealers became more sensitive to changes in execution quality across market centers after Rule 605 reports became available.[1066] The authors attribute this effect to broker-dealers factoring in information about the execution quality of market centers from Rule 605 reports when making their order routing decisions.

Market participants have access to some public information about the execution quality of market centers from sources other than Rule 605. For example, some wholesalers and ATSs produce order flow and execution quality statistics other than those required under Rule 605 and make them available either on their websites or as part of their ATS–N filings.[1067] However, these sources are either not standardized [1068] or are not available

[1057] If there were no information asymmetries and the principal could perfectly observe the agent's handling of its order, and if there is competition among agents, then the principal-agent relationship would not necessarily result in a situation where the agent's incentives may not align with the principal's, as the principal would be able to directly observe the agent's actions and switch to another agent.

[1058] *See supra* note 972, noting that a similar principal-agent problem was recognized in the Rule 11Ac1–5 Adopting Release, 65 FR 75414 (Dec. 1, 2000).

[1059] Several commenters stated that execution quality information from Rule 605 reports is generally useful, including as a ''valuable source of information which the investing public reviews to compare and evaluate executions'' (*see* BlackRock Letter at 3); as a ''valuable feature of the equities markets and provides investors the ability to make informed decisions about where to send their orders'' (*see* SIFMA Letter II at 25); and as ''the primary tool for measuring the quality of order execution in our equity markets'' (*see* McHenry et al. Letter at 3).

[1060] This was supported by comment. *See, e.g.,* Healthy Markets Letter at 15 (''Timely, reliable, and useful statistics about order execution information from trading venues is essential to empowering investors and their brokers with the information they need to make sound order routing decisions'').

[1061] *See infra* section IX.C.3.a)(1), which discusses issues with the usage of Rule 606 broker-dealer routing information and Rule 605 execution quality information to infer the execution quality achieved by broker-dealers.

[1062] Some market participants may have access to sources of execution quality information that reduce these information asymmetries and may serve as an alternative to Rule 605 data. *See infra* sections IX.C.2.b) through IX.C.2.d) for a detailed discussion. Any source of ex post execution quality information is unlikely to eliminate this information asymmetry entirely, as it is likely infeasible for any principal to perfectly observe ex ante or even in real time how an agent will perform in executing its order.

[1063] *See infra* section IX.C.4.b)(1) for a discussion of fragmentation in the market for trading services.

[1064] *See* Christopher Schwarz et al., *The 'Actual Retail Price' of Equity Trades* (working paper Sept. 14, 2022), *available at https://ssrn.com/abstract=4189239* (retrieved from SSRN Elsevier database) (''Schwarz et al. (2023)''). The authors find that this dispersion is due to off-exchange wholesalers systematically giving different execution prices for the same trades to different brokers. *See also* Bradford (Lynch) Levy, *Price Improvement and Payment for Order Flow: Evidence from A Randomized Controlled Trial* (working paper June 27, 2022), *available at https://ssrn.com/abstract=4189658* (retrieved from SSRN Elsevier database) (''Levy (2022)''). Levy (2022) also conducts a randomized controlled trial that involves trading random stocks at random times across random brokers and comparing execution quality across direct market access and PFOF-based brokers. The author found variation in the extent of price improvement provided by PFOF-based brokers, with the broker deriving high PFOF revenues providing less price improvement to customer orders compared to the broker deriving low PFOF revenue. Levy (2022) also stated that one limitation of Schwarz et al. (2023) is that they limited their study to $100 orders, so it is unclear whether execution statistics of $100 orders generalize to those of the average retail trader. However, Schwarz et al. (2023) also observe differences in the price improvement offered by broker-dealers in a more limited sample of $1,000 orders they place. Both these studies include only trades that were initiated by the authors and do not include other trades that were handled by the brokers in their samples, preventing them from examining the attributes of a typical retail order handled by each broker. As such, these studies would not observe the variation in price improvements that reflect differences in the adverse selection risk associated with the order flow of different brokers. At the same time, an analysis by the Commission found that wholesalers provide different execution quality to different retail brokers depending on the adverse selection risk of their orders; *see* Table 3 of the Proposing Release, 88 FR 3786 at 3839 (Jan. 20, 2023). Additionally, analysis submitted by two commenters also showed that for a given broker-dealer, execution quality can also vary across different wholesalers. *See* Huang et al. Letter at 27 and Professor Spatt et al. Letter at 30–32.

[1065] *See id.* at 27.

[1066] *See* Boehmer et al., *supra* note 16.

[1067] If an ATS provides one or more of its subscribers with aggregate platform-wide order flow and execution statistics that are not otherwise required disclosures under Rule 605, that ATS is required either to attach that information to its Form ATS–N, or to certify that the information is available on its website. *See* Item 26 of Form ATS–N, *available at https://www.sec.gov//files/formats-n.pdf.*

[1068] For example, reports contain different execution quality metrics or, if they contain the same execution quality metrics, these metrics are

Continued

across all market centers [1069] such that Rule 605 remains an important source of standardized information about market center execution quality. At the same time, while Rule 605 data have been used by some market participants, such as broker-dealers and investment advisers as part of their review of execution quality, and by academics, analysts and the financial press, the use of these data by both individual and institutional investors to directly evaluate and compare execution quality across market centers has been limited. The following sections will discuss the use of data under preexisting Rule 605 by individual investors, institutional investors, and other market participants.

(b) Usage of Rule 605 Reports by Individual Investors

The extent to which individual investors directly access Rule 605 reports has likely been limited. Several commenters to the Proposing Release stated that individual investors have limited or no usage of Rule 605 data.[1070] This limited usage is likely for two reasons.

First, since Rule 605 reporting requirements did not extend to broker-dealers that were not market centers prior to these amendments,[1071] investors' ability to use preexisting Rule 605 to assess and compare the execution quality that they receive from their broker-dealers has been limited. Information about the execution quality received by market centers is only or mostly relevant for investors to the extent that investors can combine this information with information about broker-dealer routing practices from Rule 606 reports to infer the execution quality of their broker-dealers. As will be discussed in detail later in this analysis, if broker-dealers receive different execution quality from a given market center, combining Rule 606 and preexisting Rule 605 data is not necessarily informative about an individual broker-dealer's average execution quality at that market center, since a market center's Rule 605 report is aggregated across all of its broker-dealer customers.[1072] This has likely limited the incentive for broker-dealer customers, including individual investors, to access Rule 605 reports. Second, to the extent that information in Rule 605 reports has been relevant to individual investors such that they are incentivized to access them, Rule 605 reports are designed to be machine readable, rather than human readable. While machine-readable data are useful for facilitating further processing and analysis,[1073] they are not easily consumable by market participants who do not have the access to necessary software or programming skills. This may limit the accessibility of Rule 605 reports, particularly for those individual investors who lack access to these resources.[1074] Such individual investors may instead prefer to consume human-readable reports or summary statistics. In the Rule 11Ac1–5 Adopting Release, the Commission anticipated that, rather than individual investors obtaining and digesting Rule 605 reports themselves, independent analysts, consultants, broker-dealers, the financial press, and market centers would analyze the information and produce summaries that respond to the needs of investors.[1075] Although the Commission is unable to observe the full extent to which this has occurred, third parties have produced information based on Rule 605 reports that is meant for public consumption. For example, data obtained from Rule 605 reports have been used by academics to study a variety of topics related to execution quality, including liquidity measurement, exchange competition, zero-commission trading, and broker-dealer execution quality.[1076] Rule 605 data have also been used in the financial press.[1077]

Unlike institutional investors,[1078] individual investors typically have limited access to alternative sources of standardized execution quality information that could be used to compare across broker-dealers other than information obtained (directly or indirectly) from reports under prior Rule 605.[1079] The requirement in Rule 606(b)(3) for broker-dealers to provide individualized reports of execution quality to their customers upon request does not extend to held orders, which are those most used by individual investors,[1080] and contains a customer-level de minimis exception that likely excludes most individual investors.[1081] In addition, many individual investors likely do not have access to the data processing tools and/or sufficiently granular datasets that are required to calculate their own execution quality statistics, which makes it difficult for them to compare how execution quality varies across broker-dealers.[1082] One exception is the recent effort by a few

calculated using different methodologies, different samples of stocks, and/or different time horizons, making it difficult to compare across reporting entities. For example, some ATSs produce execution quality information on a monthly basis (*see, e.g., Unlocking Global Liquidity,* UBS, *available at https://www.ubs.com/global/en/investment-bank/electronic-trading/equities/unique-liquidity.html*) (last visited Jan. 25, 2024, 4:26 p.m.), while at least one ATS operator produces reports on a quarterly basis (*see, e.g., JPM–X & JPB–X U.S. Quarterly Summary,* J.P. Morgan, *available at https://www.jpmorgan.com/solutions/cib/markets/jpm-x-jpb-x-us-quarterly-summary*) (last visited Jan. 25, 2024, 5:05 p.m.).

[1069] While the FIF Template provides a standardized template for summary information about execution quality for retail investor orders in exchange-listed stocks, the Commission understands that currently only one retail broker voluntarily provides reports using the FIF Template. *See supra* note 973.

[1070] *See, e.g.,* Direct Edge Letter at 10, stating that ''Rule 605 is not a meaningful factor in how retail investors decide which brokers to use and how to place and route orders;'' *see also* comments discussed in the Proposing Release, 88 FR 3786 at 3833, n.541–542 (Jan. 20, 2023).

[1071] Prior to these amendments, a broker-dealer may have been subject to Rule 605 reporting requirements to the extent that the broker-dealer was acting as or operates a market center. However, such reports were required to cover the orders that the broker-dealer handled within its capacity as a market center. *See* Proposing Release, 88 FR 3786 at 3798, n.179–180 (Jan. 20, 2023) and corresponding text, for further discussion.

[1072] *See infra* section IX.C.3.a)(1) for a detailed discussion.

[1073] *See* discussion in *supra* section IX.C.2.c).

[1074] Several commenters described a similar assessment of usability of Rule 605 reports for individual investors. *See, e.g.,* Robinhood Letter at 41, stating that ''[Rule 605 data] has proven not to be a particularly useful format for individual investors;'' and TastyTrade Letter at 4, stating that ''neither [Rule 606 nor Rule 605] report is easily digestible nor often, if ever, used by retail customers.''

[1075] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75419 (Dec. 1, 2000).

[1076] *See, e.g.,* Ruslan Y. Goyenko et al., *Do Liquidity Measures Measure Liquidity?,* 92 J. Fin. Econ. 153 (2009); Edward D. Watson & Donovan Woods, *Exchange Introduction and Market Competition: The Entrance of MEMX and MIAX,* 54 Glo. Fin. J. (2022) 100756; Pankaj K. Jain et al., *Trading Volume Shares and Market Quality: Pre- and Post-Zero Commissions* (working paper Feb. 15, 2023), *available at https://ssrn.com/abstract=3741470* SSRN 3741470 (retrieved from SSRN Elsevier database); Schwarz et al. (2023), *supra* note 1064; Anne Haubo Dyhrberg et al., *The Retail Execution Quality Landscape* (working paper Dec. 10, 2022), *available at https://ssrn.com/abstract=4313095* SSRN 4313095 (retrieved from SSRN Elsevier database).

[1077] *See, e.g.,* Bill Alpert, *Who Makes Money on Your Stock Trades,* Barron's (Feb. 28, 2015) (retrieved from Factiva database) (stating that ''we ran each market maker's Rule 605 execution reports through statistical-analysis scripts that we wrote in the widely used open-source math software known as 'R.' '').

[1078] *See* discussion in *infra* section IX.C.2.c).

[1079] There are also some broker-dealers that disclose their own execution quality metrics on their respective websites, but the disclosures are not standardized and tend to differ in ways that make them difficult to compare, such as reporting different metrics, using different methodologies, or using different samples of stocks. *See supra* note 973.

[1080] *See supra* note 1002 describing an analysis showing that not held orders made up only 19% of total shares and about 12% of total number of orders among the sample of orders received from the individual accounts.

[1081] *See supra* note 1003 describing the customer-level de minimis exception of Rule 606(b)(5).

[1082] *See infra* section IX.C.3.a)(1) discussing several analyses that find significant differences in execution quality across retail brokers.

broker-dealers and wholesalers to make available voluntary summary disclosures of execution quality in exchange-listed stocks for individual investors using the FIF Template.[1083] Although the reports produced using the FIF Template may be useful, this disclosure is voluntary, and only a few firms are making or have made such disclosures. The Commission understands that only three retail brokers began producing reports using the FIF Template in 2015 on a quarterly basis. One of these broker-dealers was acquired and stopped producing these reports in 2017, and another stopped producing these reports in 2018. Only one retail broker currently produces reports using the FIF Template.[1084] Likewise, the Commission understands that there is currently only one wholesaler producing reports using the FIF Template.[1085]

(c) Usage of Rule 605 Reports by Institutional Investors

The Commission understands that, while the usage of Rule 605 reports by institutional investors has been limited by several factors, Rule 605 reports nevertheless contain information about execution quality that has been useful for institutional investors.

First, the ability of institutional investors to use preexisting Rule 605 to assess and compare the execution quality that they receive from their broker-dealers has been limited, for several reasons. First, Rule 605 reports only contain information about the execution quality of investors' held orders. Not held orders, which are excluded from the definition of ''covered order,'' [1086] are excluded from Rule 605 metrics.[1087] As many institutional orders tend to be not held,[1088] this may limit the extent to which Rule 605 reports contain relevant information for institutional investors. Second, to the extent that institutional investors make use of held orders,[1089] the ability of institutional investors to use Rule 605 reports in combination with Rule 606 reports to assess the execution quality of broker-dealers has been limited for the same reasons described above.[1090] This has likely limited the incentives for some institutional investors to access Rule 605 reports.

Second, even if institutional investors are incentivized to access execution quality information such as that in Rule 605 reports, institutional investors typically have access to alternative sources of execution quality information. Many institutional investors regularly conduct, directly or through a third-party vendor, transaction cost analysis (''TCA'') of their orders to assess execution quality against various benchmarks. Institutional investors that perform their own in-house analyses of execution quality or obtain analyses of execution quality from third-party vendors may have been less likely to rely on information from Rule 605 reports. Furthermore, Rule 606(b)(3) requires broker-dealers to provide some of their customers with individualized reports of execution quality of not held orders upon request.[1091] Since not held orders, which are not covered by Rule 605 reporting requirements,[1092] are most likely to be utilized by institutional investors,[1093] Rule 606(b)(3) provides institutional investors with another alternative source of information about the execution quality of their orders. Given the large size of most institutional investors and their businesses, institutional investors may also have sufficient bargaining power such that broker-dealers have strong incentives to provide them with execution quality information of their held orders when asked. However, any ad hoc reports that institutional investors may receive from their broker-dealers containing information about their held orders may not be sufficiently standardized to allow for easy comparisons across broker-dealers or market centers.

At the same time, the information on execution quality that is collected by institutional investors from these alternative sources may only cover the institutions' own orders, and as such could be highly individualized and nonpublic.[1094] Therefore, institutional investors may not be able to use these individualized reports to compare their broker-dealers' execution quality to that of broker-dealers with which they do not currently have a relationship, or to examine the execution quality of a market center to which their broker-dealers do not currently route orders.[1095] In contrast, because Rule 605 reports are public, institutional investors can use these reports to assess the execution quality of the broker-dealers and market centers with which they do not currently do business.

To the extent that institutional investors do utilize Rule 605 reports, the Commission believes that, due to their typically greater resources, institutional investors may be more likely than individual investors to access Rule 605 reports directly. Rule 605 reports are machine-readable, which makes them useful for facilitating further processing and analysis by market participants that have access to the resources necessary for handling large amounts of raw data,

[1083] *See supra* note 973 and accompanying text for further discussion of the FIF Template.

[1084] *See Retail Execution Quality Statistics,* Fin. Info. F., *available at https://fif.com/tools/retail-execution-quality-statistics* (last visited Jan. 18, 2024); *Retail Execution Quality Statistics Q2—2022, Fidelity*, *available at https://www.fidelity.com/bin-public/060_www_fidelity_com/documents/FIF-FBS-retail-execution-quality-stats.pdf* (last visited Jan. 26, 2024).

[1085] *See* Retail Execution Quality Statistics, *supra* note 1084; *Retail Execution Quality Statistics—Wholesale Market Maker Perspective,* Two Sigma, *available at https://www.twosigma.com/businesses/securities/execution-statistics/* (2024). The Commission is aware of at least two wholesalers that formerly produced reports using the FIF Template, but both stopped in Q3 2019.

[1086] *See* prior 17 CFR 242.600(b)(22). Currently, there are no requirements for aggregated information about the execution quality of not held orders to be made public. The potential ability for customers and broker-dealers to use aggregated order handling information for not held orders to better understand broker-dealers' routing behavior or compare broker-dealers' order routing performance is limited because of the disparate behavior of customers when using not held orders. *See, e.g.,* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58369–70 (Nov. 19, 2018), in which the Commission stated that, in contrast to held orders, not held order flow is diverse and customers may provide specific order handling instructions to their broker-dealers, limit the order handling discretion of their broker-dealers, or have specific needs that impact the broker-dealers' handling of these orders.

[1087] *See supra* note 1003 and accompanying text discussing broker-dealer requirements under Rule 606(b)(3) to provide individualized reports of execution quality upon request for not held orders.

[1088] *See supra* note 1002 discussing an analysis showing that institutional investors are more likely than individual investors to use not held orders.

[1089] For example, large institutional ''parent'' orders are often split into multiple smaller ''child'' orders, which may be handled as held orders and reflected in Rule 605 reports. Institutional investors may incorporate information from Rule 605 reports into their TCA when evaluating the performance of their broker-dealers' Smart Order Router (''SOR'') algorithms. *See infra* section IX.C.4.a)(1)(b) discussing the use of SORs by broker-dealers to split a large institutional ''parent'' order into multiple ''child'' orders in a way that achieves the best execution for the parent order.

[1090] *See supra* note 1072 and *infra* section IX.C.3.a)(1).

[1091] *See supra* section IX.C.1.b) discussing broker-dealer reporting requirements under Rule 606; *see also supra* note 1003 describing the customer-level de minimis exception of Rule 606(b)(5).

[1092] The exclusion of held orders from Rule 605 reporting requirements is not affected by these amendments.

[1093] *See supra* note 1002 discussing an analysis showing that institutional investors are more likely than individual investors to use not held orders.

[1094] In 2018, the Commission proposed but ultimately did not adopt a requirement that broker-dealers that handle orders subject to the customer-specific disclosures required by Rule 606(b)(3) issue a quarterly public aggregated disclosure on order handling. *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58369 (Nov. 19, 2018).

[1095] Some broker-dealers may make aggregate execution quality information from their customer's orders available to other institutional investors. However, for the reasons described in *supra* section IX.B, this information may not be standardized.

such as many institutional investors. However, the Commission understands some institutional investors may use aggregated statistics or summaries of Rule 605 reports prepared by third parties, who make these reports available, possibly for a fee.

(d) Other Users of Rule 605 Reports

While the direct usage of Rule 605 reports by individual and institutional investors may have been limited, Rule 605 reports have been used by other market participants, including analysts and researchers,[1096] as well as financial service providers, such as investment advisers and broker-dealers, that are subject to best execution obligations.

The Commission understands that investment advisers and broker-dealers typically use Rule 605 reports as part of their internal review of execution quality. As fiduciaries, investment advisers owe their clients a duty of care and a duty of loyalty.[1097] The duty of care includes, among other things, the duty to seek best execution of a client's transactions where the investment adviser has the responsibility to select broker-dealers to execute client trades.[1098] Broker-dealers also have an obligation to seek best execution of customer orders.[1099] The Commission understands that these financial service providers often have Best Execution Committees that periodically review order execution quality, and typically use Rule 605 reports as part of their review.[1100]

3. Disclosure Requirements Under Preexisting Rule 605

The information disclosed under preexisting Rule 605 has provided significant insight into execution quality at different market centers. However, market participants' access to information about execution quality under Rule 605 has been limited in several areas. Specifically, broker-dealers that are not market centers have not been required to report under Rule 605, which has limited market participants' ability to assess and compare the execution quality that broker-dealers obtain for their customers. Furthermore, changes in equity market conditions and technological advancements since Rule 11Ac1–5 was adopted in 2000, such as an increase in the number of high-priced stocks,[1101] the corresponding greater use of odd-lots, and the greater speed of trading in some stocks, have led to a situation in which certain aspects of Rule 605 reports are no longer as well-tailored to current market conditions.

(a) Scope of Reporting Entities Under Preexisting Rule 605 Reporting Requirements

The scope of entities that were required to report under Rule 605 prior to these amendments did not include broker-dealers that only route customer orders externally, rather than executing customer orders internally, because they did not meet the definition of a market center. As a result, it has been difficult for market participants to use available execution quality statistics to compare execution quality across these broker-dealers. Furthermore, to the extent that firms operating two separate market centers commingled execution quality information about multiple market centers in Rule 605 reports, this has made it difficult for market participants to assess the execution quality of each market center individually.

(1) Broker-Dealers

Prior to these amendments, broker-dealers that were not market centers were not required to prepare Rule 605 reports,[1102] which has limited market participants' ability to assess and compare the execution quality that broker-dealers obtain for their customers.

Rules 605 and 606 operate together to allow investors to evaluate what happens to their orders after investors submit their orders to a broker-dealer for execution.[1103] If a market center's Rule 605 reports are representative of the aggregate execution quality that any given broker-dealer receives from that market center, then a customer of a broker-dealer can use that broker-dealer's Rule 606 reports to identify the venues to which the broker-dealer regularly routes orders for execution and use Rule 605 reports to get information on aggregate order execution quality at those market centers.[1104] However, if the aggregate execution quality from a given market center varies across broker-dealers, combining Rule 606 and Rule 605 data will not be informative about the execution quality of individual broker-dealers' average execution quality.[1105]

[1096] *See, e.g., supra* notes 1076–1077, describing the use of Rule 605 data in academic literature, in comment letters related to Commission and SRO rulemaking, and the financial press.

[1097] *See* Investment Advisers Act Release No. 5248 (June 5, 2019), 84 FR 33669 (July 12, 2019) (Commission Interpretation Regarding Standard of Conduct for Investment Advisers) (''IA Fiduciary Interpretation'').

[1098] *See, e.g.,* Investment Advisers Act Rule 206(3)–2(c). The Commission previously has described the contours of an investment adviser's duty to seek best execution. *See* IA Fiduciary Interpretation, 84 FR 33669 at 33674–75 (July 12, 2019). In addition, the Commission has brought a variety of enforcement actions against registered investment advisers in connection with their alleged failure to satisfy their duty to seek best execution. *See, e.g., In the Matter of Aventura Capital Management, LLC,* Investment Advisers Act Release No. 6103 (Sept. 6, 2022) (settled action); *In the Matter of Madison Avenue Securities, LLC,* Investment Advisers Act Release No. 6036 (May 31, 2022) (settled action).

[1099] *See, e.g.,* Regulation NMS Adopting Release, 70 FR 37496 at 37537 (June 29, 2005); *Newton* v. *Merrill, Lynch, Pierce, Fenner & Smith, Inc.,* 135 F.3d 266, 269–70, 274 (3d Cir. 1998), *cert. denied,* 525 U.S. 811 (1998); *Certain Market Making Activities on Nasdaq,* Securities Exchange Act Release No. 40900, 53 SEC 1150, 1162 (1999) (settled case) (*citing Sinclair* v. *SEC,* 444 F.2d 399 (2d Cir. 1971); *Arleen Hughes,* 27 SEC 629, 636 (1948), *aff'd sub nom. Hughes* v. *SEC,* 174 F.2d 969 (D.C. Cir. 1949)).

[1100] *See, e.g.,* Citigroup Letter II at 7 (stating that, ''under the current market structure, broker-dealers closely review and analyze Rule 605 statistics as part of their regular and rigorous review for best execution'').

[1101] *See, e.g., infra* note 1133.

[1102] Prior to these amendments, a broker-dealer may have been subject to Rule 605 reporting requirements to the extent that the broker-dealer was acting as or operates a market center. *See supra* note 1071 for further discussion.

[1103] *See supra* note 999 and accompanying text.

[1104] *See supra* section IX.C.1.b) for a discussion of broker-dealers' current reporting requirements under Rule 606.

[1105] Several commenters stated that market participants' ability to use Rule 606 and Rule 605 reports to assess and compare broker-dealers' execution quality is currently limited. *See, e.g.,* Vanguard Letter at 3–4; Nasdaq Letter at 43; Virtu Letter II at 11; *see also supra* note 1070, describing a commenter who stated that Rule 605 reports are generally not a meaningful factor in how retail investors decide which brokers to use and how to place and route orders.

Specifically, combining this data will not be informative because a market center's Rule 605 report is aggregated across all of its broker-dealer customers, meaning that it is not possible to determine how execution quality varies across individual broker-dealers at a particular market center.[1106] This is an important consideration given evidence that execution quality can differ significantly across broker-dealers, and that this dispersion is at least partially due to off-exchange wholesalers systematically giving different execution prices for the same trades to different brokers.[1107]

(2) Reporting Entities That Operate SDPs

Prior to these amendments, the commingling of SDP activity in Rule 605 reports with other market center activity, by market centers that also operate SDPs, may have obscured or distorted information about the market centers' execution quality, making it more difficult for market participants to observe the execution quality of each separate trading venue. For example, an SDP that accepts IOC orders will offer different order execution quality than other market centers.[1108] These types of SDPs are sometimes called ''ping pools,'' [1109] reflecting that institutional investors use these venues to ''ping'' (*i.e.,* submit a small order in search of hidden liquidity on) SDPs, often using IOC orders.[1110] IOC orders typically have different execution profiles than other types of orders, including lower fill rates.[1111] Combining information on orders submitted to a market center's SDP ''ping pool'' along with its other orders will therefore effect a downward skew on the market center's fill rates, and analogously an upward skew on the SDP's fill rates.[1112] This may particularly be the case for wholesalers who combine the orders submitted to their SDPs with orders that are internalized or executed on a riskless principal basis,[1113] since SDP activity represents a significant portion of their trading volume.[1114] Also, since information on executions in SDPs largely reflects institutional orders, combining information on SDP orders along with other orders will tend to obscure information that is particularly relevant for institutional investors or broker-dealers handling institutional investors' orders in assessing differences across these market centers. To the extent that institutional investors have been less able to observe and compare differences in execution quality across market centers as a result, this may have reduced incentives for these market centers to compete for institutional investor orders on the basis of execution quality.

(b) Coverage of Orders Under Preexisting Rule 605 Reporting Requirements

Prior to these amendments, Rule 605 reporting requirements excluded execution quality information about some order sizes and types that are relevant to market participants.

[1106] For example, consider two broker-dealers, Broker-Dealer 1 and Broker-Dealer 2, which both route orders to a market center (''Market Center A'') according to these broker-dealers' Rule 606 reports. Assume that the orders routed by Broker-Dealer 1 receive consistently below-average execution quality from the wholesaler, while the orders routed by Broker Dealer 2 receive consistently above-average execution quality. If a customer of Broker-Dealer 1 were to examine Market Center A's Rule 605 report to get a sense of the average execution quality that its broker-dealer achieves for its orders, the customer would see only the execution quality statistics aggregated across Broker-Dealers 1 and 2, which would likely reveal that Market Center A offers about average levels of execution quality. However, this would not reveal the worse execution quality that Broker-Dealer 1, and therefore the customer of Broker-Dealer 1, is receiving from the market center.

[1107] *See supra* note 1076 for a discussion of Schwarz et al. (2023), an academic paper finding that OTC market maker execution quality of identical orders differed significantly across different broker dealers, and that this dispersion was due to off-exchange wholesalers systematically giving different execution prices for the same trades to different brokers. *See also* Table 3 of the Proposing Release, 88 FR 3786 at 3839 (Jan. 20, 2023), showing that wholesalers provide different execution quality to different retail brokers depending on the adverse selection risk of their orders.

[1108] *See supra* section II.C.2 for additional discussions on different types of SDPs.

[1109] *See, e.g.,* Annie Massa, *Trader VIP Clubs, 'Ping Pools' Take Dark Trades to New Level,* Miami Daily Bus. J. (Jan. 17, 2018) (retrieved from Factiva database).

[1110] *See, e.g.,* Rule 605 Citadel Letter at 7, stating that ''[m]any wholesale broker-dealers execute immediate-or-cancel ('IOC') orders for non-retail investors (including pension plans, insurance companies, and other asset managers), particularly through the use of a single-dealer platform ('SDP').''

[1111] *See infra* section IX.C.3.c)(9) for discussion of differences between marketable IOC order executions and the executions of other marketable order types.

[1112] *See, e.g.,* Rule 605 Citadel Letter at 7, stating that ''[a]t the moment, depending on the structure of the broker-dealer, these IOC orders [executed on SDPs] may be aggregated with retail orders for reporting purposes, even though the execution profile is very different and could negatively skew a wholesale broker-dealer's execution quality metrics.''

[1113] *See infra* section IX.C.3.c)(10) for a discussion of how the treatment of wholesalers' riskless principal trades in Rule 605 reports may also obscure information on execution quality.

[1114] *See infra* note 1312 and accompanying text, describing that the combined trading volume of the affiliated SDPs of the two most active wholesalers accounted for over 4% of total U.S. consolidated trading volume in Q1 2023.

To estimate the percentage of shares that have been excluded from Rule 605 reporting requirements and the driving factor behind their exclusion (*i.e.,* whether they are excluded based on their submission time, type, or size), the Commission analyzed data from the Tick Size Pilot B.I Market Quality dataset,[1115] which had much broader reporting requirements than Rule 605 prior to these amendments,[1116] for a period from April 2016 to March 2019. As a first step, approximately 25% of orders were estimated to have been excluded from Rule 605 requirements as they were flagged as having special handling requests.[1117] A breakdown of the remaining submitted share volume (*i.e.,* after excluded special handling orders) is presented in Figure 4,[1118] and shows that around 2.2% of shares were excluded from preexisting Rule 605 reporting requirements due to having effective times outside of regular trading hours. A further 51.6% of shares were excluded from Rule 605 reports because they were of an order type that was excluded from reporting requirements prior to these amendments.[1119] An additional 11.3% of the remaining order volume was excluded from Rule 605 reports because of the exclusion of orders less than 100 shares and larger-sized orders from reporting requirements prior to these amendments. This leaves only around a third of share volume that was eligible to be included in Rule 605 reports prior to these amendments.[1120]

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[1115] *See* Securities Exchange Act Release No. 72460 (June 24, 2014), 79 FR 36840 (June 30, 2014) (Order Directing the Exchanges and the Financial Industry Regulatory Authority To Submit a Tick Size Pilot Plan) (''Tick Size Pilot Plan''). The Tick Size Pilot B.I Market Quality dataset contains information for approximately 2,400 small cap stocks for a period from Apr. 2016 to Mar. 2019. As the Tick Size Pilot data only collected data for small cap stocks, results using this dataset are not necessarily representative of all stocks.

[1116] *See* FINRA, Appendix B and C Requirements and Technical Specifications, *available at https://www.finra.org/sites/default/files/Appendix_B_C_Reporting_Requirements_version2.pdf.* Order types that are included in the Tick Size Pilot dataset that are not covered by Rule 605 include Resting Intermarket Sweep orders, Retail Liquidity Providing orders, Midpoint Passive Liquidity orders, Not Held orders, Clean Cross orders, Auction orders, and orders that became effective when an invalid NBBO was in effect. Order sizes included in the Tick Size Pilot dataset that are not covered by Rule 605 include orders for between 1–99 shares and orders for 10,000+ shares. *See also* FINRA, Tick Size Pilot Program, Appendix B and C Statistics Frequently Asked Questions, *available at https://www.finra.org/sites/default/files/Tick-Size-Pilot-Appendix-B-and-C-FAQ.pdf* (''Tick Size Pilot FAQs''), answer to Question 2.1. Furthermore, the Tick Size Pilot dataset includes separate statistics for orders submitted outside of regular trading hours (trading sessions E and BE). *See* Tick Size Pilot FAQs, answer to Question 4.11.

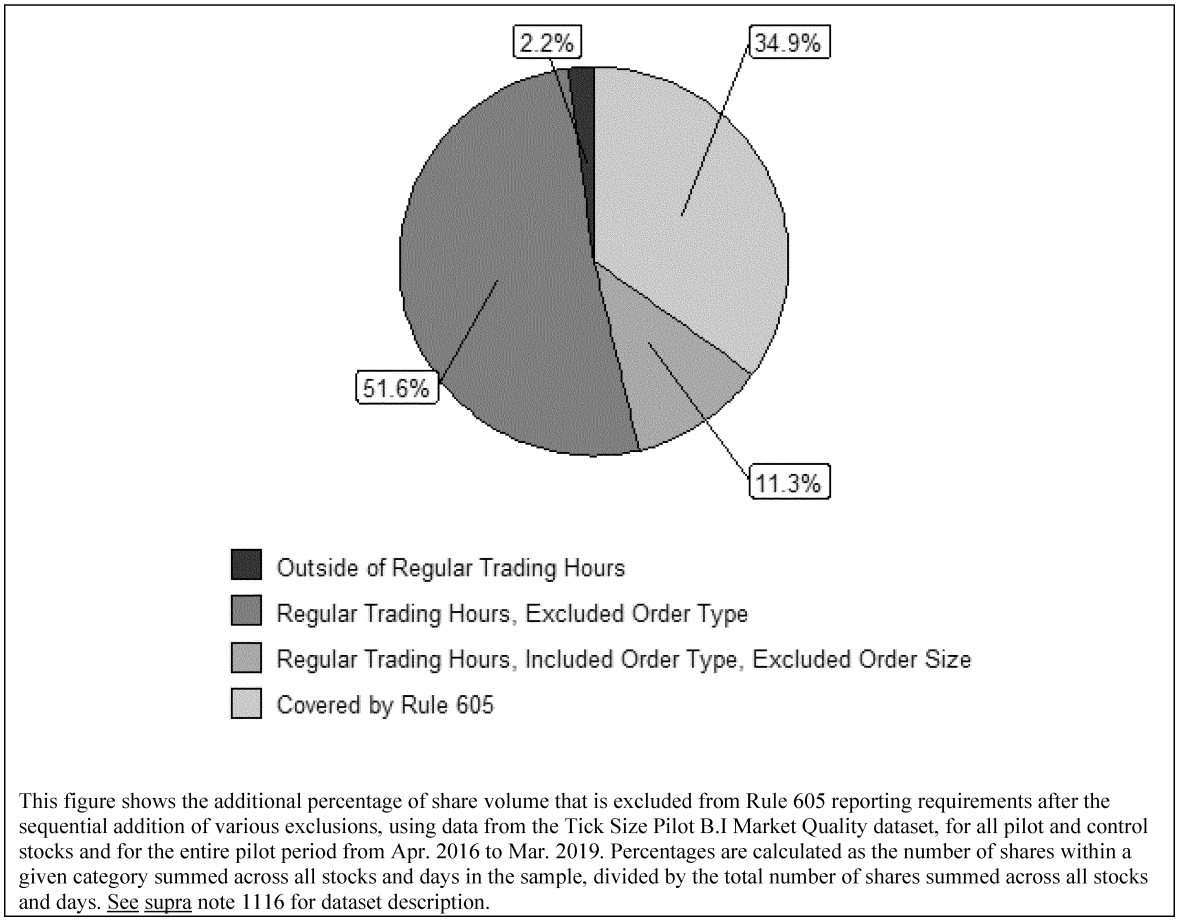
[1117] These orders will continue to be excluded following the amendments to Rule 605, as the amended definition of covered orders will continue to exclude orders subject to special handling. *See* final 17 CFR 242.600(b)(27).

[1118] The same figure can be found in the Proposing Release; *see* Proposing Release, 88 FR 3786 at 3840 (Figure 2) (Jan. 20, 2023).

[1119] Of the shares excluded on the basis of order type, the largest percentage (73.6%) are excluded because they are not-held orders.

[1120] An additional percentage of this order flow is also excluded from coverage due to the exclusion of stop-loss orders and non-exempt short sales, but these are not one of the listed order types in the Tick Size Pilot dataset and therefore it is not possible to exclude them. *See* Appendix B and C Requirements and Technical Specifications, *supra* note 1116. In addition, an analysis in the Proposing Release examined changes over time in one market center's Rule 605 coverage (as compared to its execution volume in TAQ), and found that Rule 605 coverage was on a slightly downward trend between mid-2012 and Feb. 2021, when an estimated 50% of shares executed during regular market hours were included in Rule 605 reports. *See* Figure 3 of the Proposing Release, 88 FR 3786 at 3841 (Jan. 20, 2023). An analysis of more recent data found that this number rose somewhat in 2023, to around 64% as of Aug. 2023.

Figure 4: Rule 605 Coverage, by Submission Time, Order Type, and Order Size, Apr. 2016 to Mar. 2019



This figure shows the additional percentage of share volume that is excluded from Rule 605 reporting requirements after the sequential addition of various exclusions, using data from the Tick Size Pilot B.I Market Quality dataset, for all pilot and control stocks and for the entire pilot period from Apr. 2016 to Mar. 2019. Percentages are calculated as the number of shares within a given category summed across all stocks and days in the sample, divided by the total number of shares summed across all stocks and days. See supra note 1116 for dataset description.

The following sections will discuss the various facets of preexisting Rule 605 reporting requirements that led to the exclusion of orders from Rule 605 reports prior to these amendments, as well as the extent to which these orders are relevant for assessing execution quality. This includes orders that were excluded on the basis of size, as well as other orders that were excluded such as stop orders, non-exempt short sale orders, and orders submitted outside of regular trading hours.

(1) Orders Less Than 100 Shares and Larger-Sized Orders

Prior to these amendments, orders of certain sizes were excluded from Rule 605 reporting requirements, including orders for less than 100 shares and larger-sized orders.[1121] Taken together, data on the usage of orders of these sizes imply that a large percentage of orders and trades was excluded from preexisting Rule 605 reporting requirements on the basis of order size, thus limiting the ability of reporting entities to compete for customers on the basis of execution quality.

(a) Orders Less Than 100 Shares

Due to preexisting Rule 605's exclusion of orders sized smaller than 100 shares, which excluded all odd-lot orders and, in some cases, round lot orders where a round lot was less than 100 shares, information about an important segment of order flow has been missing from Rule 605 reports.[1122]

The rise in the use of odd-lot orders is a phenomenon that has been well-documented in modern markets.[1123] An analysis of data from the SEC's MIDAS analytics tool [1124] confirms that the use of odd-lots has increased substantially as a percentage of total on-exchange trades within the past decade. Figure 5 [1125] plots monthly averages of odd-lot

[1121] *See* prior 17 CFR 242.605(a)(1). The size categories in preexisting Rule 605 included: 100 to 499 shares; 500 to 1,999 shares; 2,000 to 4,999 shares; and 5,000 or greater shares. *See* prior 17 CFR 242.600(b)(13); *see also supra* note 9 discussing the Large Order Exemptive Relief, which grants exemptive relief to any order with a size of 10,000 shares or greater.

[1122] The idea that Rule 605 reports have been missing an important segment of order flow because of the preexisting exclusion of orders less than 100 shares was supported by comment. *See, e.g.,* Rule 605 Citadel Letter at 11; Better Markets Letter at 3; and Virtu Letter II at 9. In addition, citing an earlier comment letter examining how the inclusion of odd-lots would impact execution quality metrics, one commenter stated that the lack of information about odd-lots in preexisting Rule 605 ''has created perverse reporting issues.'' Healthy Markets Letter at 17, *citing* Healthy Markets 2019 Letter (Mar. 5, 2019), *available at https://www.sec.gov/comments/4-729/4729-5020185-182987.pdf.*

[1123] *See, e.g.,* Proposing Release, 88 FR 3786 at 3808, n.273 (Jan. 20, 2023). Until the round lot definition adopted pursuant to the MDI Rules is implemented, round lots continue to be defined in exchange rules. For most NMS stocks, a round lot is defined as 100 shares. Following the implementation of the MDI Rules, for stocks with prices greater than $250, a round lot will be defined as consisting of between 1 and 40 shares, depending on the tier. *See supra* note 1016 for a definition of these tiers.

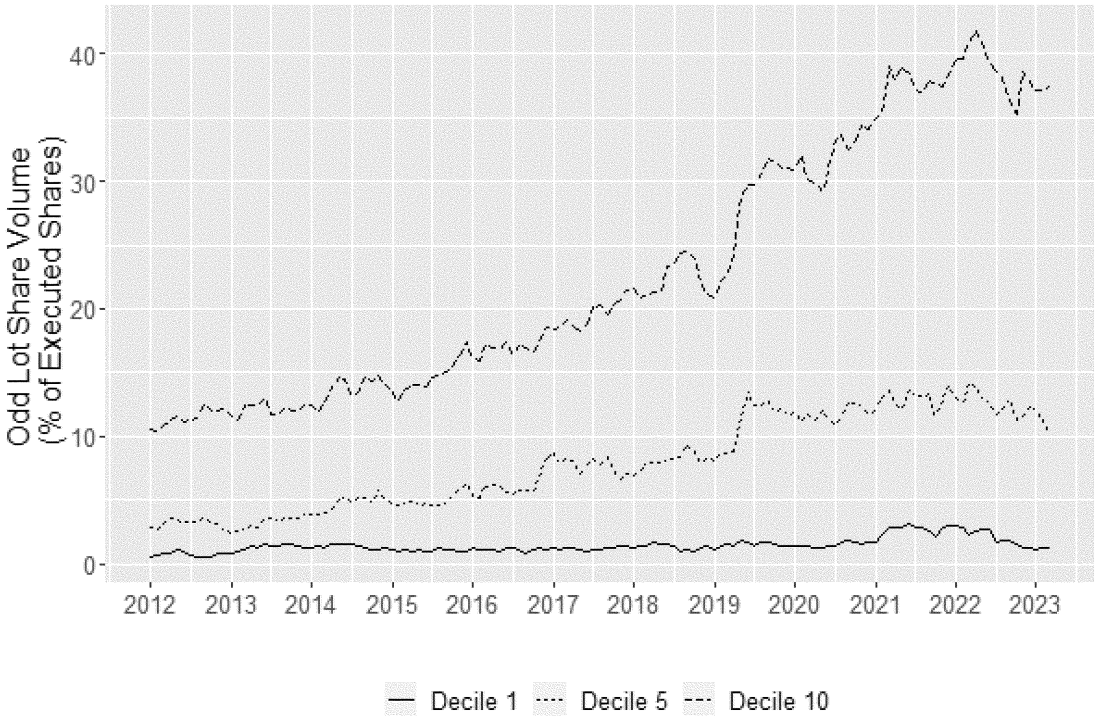
[1124] *See Summary Metrics by Decile and Quartile,* SEC (2023), *available at https://www.sec.gov/marketstructure/downloads.html.* This analysis uses data between Jan. 2012 and Mar. 2023.

[1125] The data used in this analysis have been updated since the Proposing Release to include a more recent time period. *See* Proposing Release, 88 FR 3786 at 3842 (Figure 4) (Jan. 20, 2023), which presents the same analysis for the period of Jan. 2012 to Mar. 2022. Between Mar. 2022 and Mar. 2023, we observe small overall declines in odd-lot share volumes. However, these differences due to

Continued

share volumes across stock price deciles, showing that executed odd-lot shares as a percentage of total executed shares have increased sharply between 2012 and 2023, for high-priced stocks in particular.[1126] Specifically, the figure shows that odd-lot share volume increased from around 0.6% to 1.25% for the lowest-price stocks (Decile 1), and from 10.6% to 37.5% for the highest-priced stocks (Decile 10).[1127]

Figure 5: Odd-Lot Share Volumes by Stock Price Deciles, Jan. 2012 to Mar. 2023



This figure plots odd-lot shares executed on national securities exchanges as a percentage of total on-exchange executed shares, across stock price deciles for the period from Jan. 2012 to Mar. 2023. For brevity the plot contains data for the smallest (Decile 1), median (Decile 5) and largest (Decile 10) stock price deciles. See supra note 1124 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1123 and section IX.C.1.c)(2).

There is evidence that these high percentages are not only the case for odd-lot trades, but for odd-lot orders as well. Using data from January to March 2021, a recent academic working paper found that the rate of orders sized between 1 and 100 shares ranges from 5.6% of all submitted orders for less than 500 shares in the lowest-priced stocks, to 46.9% of all such orders in the highest-priced stocks.[1128] This is supported by an analysis of the distribution of order sizes using order submission data from MIDAS for a sample of 80 stocks [1129] during the month of Mar. 2023.[1130] Confirming

updates to the dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that odd lots represent a significant percentage of executed share volume.

[1126] The number of executed odd-lot shares may be higher following the implementation of the MDI Rules due to the availability of odd-lot quotes in consolidated market data, which may result in numbers that are different from those reported here. For stocks priced above $250, the change in the definition of round lots may in result in fewer executed odd-lot shares, as more odd-lot trades will be incorporated into the definition of round lots. *See supra* section IX.C.1.c)(2) for further discussion.

[1127] *See, e.g.,* Virtu Letter II at 7 (quoting Phil Mackintosh, *Odd Facts About Odd Lots,* NASDAQ (Apr. 22, 2021, 10:23 a.m. EDT), *available at https://www.nasdaq.com/articles/odd-facts-about-odd-lots-2021-04-22*), that ''over the past nine years the proportion of odd-lot trades has roughly tripled, and in high-priced stocks, odd-lots have increased to 70% of all trades.'' Another commenter stated that, based on data from TAQ, ''two-thirds of all trades represent odd-lots.'' Professor Schwarz et al. Letter at 4.

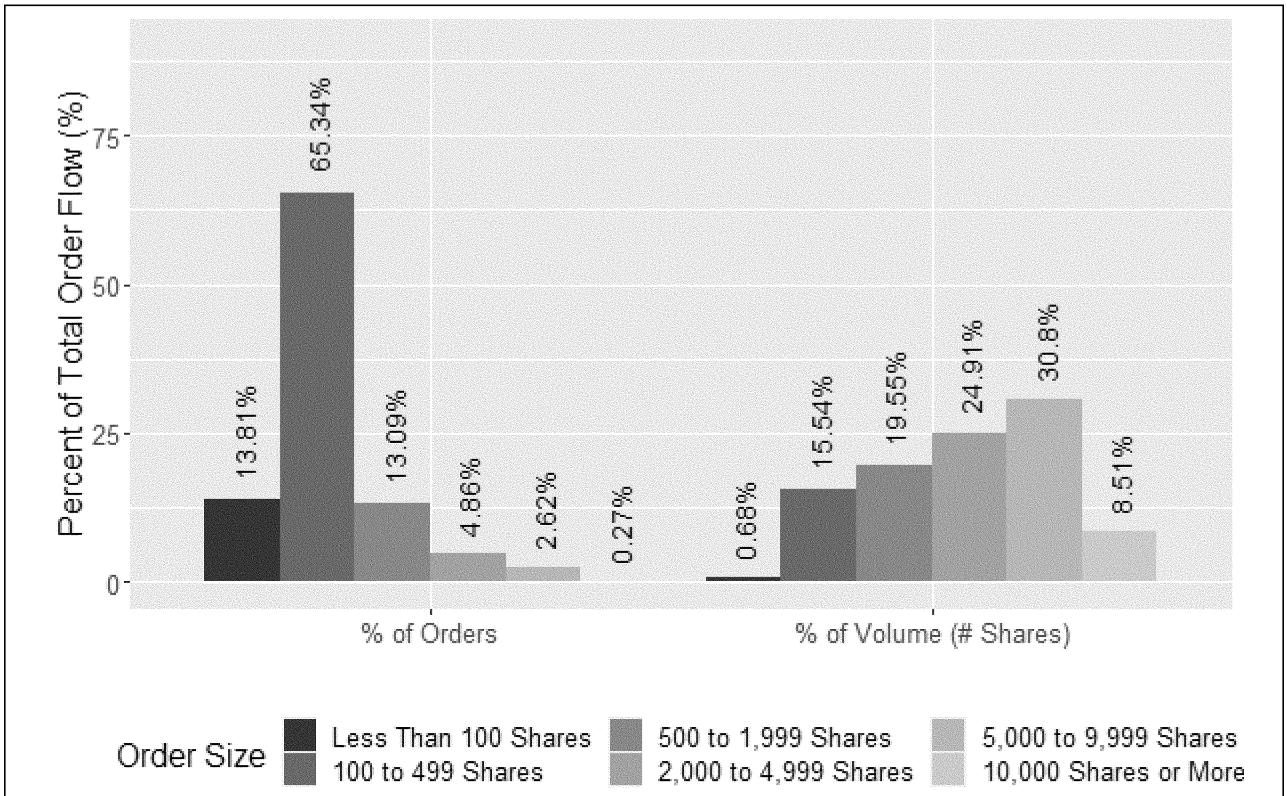
[1128] *See* Bartlett, et al (2022), *supra* note 33. The authors divide their sample of stocks into five price-based buckets, with stocks in the lowest-priced group defined as those priced at $20.00 or less, and stocks in the highest-priced group priced at $250.00 or more.

[1129] This sample of 80 stocks was constructed from the sample of 400 stocks described in *infra* note 1181, in which a random sample of 5 stocks was selected from each of the 16 combinations of market capitalization group and price quartile.

[1130] This dataset consists of NMLO order submission data collected from MIDAS and includes the posted orders and quotes on 11 national securities exchanges, for a sample of 80 stocks, across all trading days in Mar. 2023. For more details on this dataset, *see https://www.sec.gov/marketstructure/midas-system. See supra* note 1129 for information about the sample selection. The MIDAS dataset has some limitations. First, MIDAS data include only on-exchange, non-marketable limit orders that do not execute immediately, and thus do not include some orders that are included in Rule 605 data both prior to and after these amendments, such as market and marketable limit orders, inside-the-quote NMLOs that execute immediately, IOC orders, and off-exchange orders. Furthermore, MIDAS data include some order types that were excluded from Rule 605 prior to these amendments but that are not possible to distinguish in MIDAS data, such as short sale orders, as well as some order types that are excluded from Rule 605 data both prior to and after

results from Figure 5 examining the time series of odd-lot order rates, Figure 6 [1131] shows that odd-lot orders make up a significant percentage of orders (13.81%), although these orders are only a small percentage of total submitted share volume (0.68%).[1132]

Figure 6: Distribution of NMLOs across Order Size Buckets, Mar. 2023



This figure plots the percentage of NMLOs that can be categorized into the preexisting Rule 605 order size categories, using order submission data from MIDAS. Percentages are calculated as the number of orders (resp. shares) within a given order size category summed across all stocks and days in the sample, divided by the total number of orders (resp. shares) summed across all stocks and days. See supra note 1130 for dataset description.

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these amendments, such as orders with special handling requests. Second, in order to identify the NBBO at the time of order receipt, this dataset uses timestamps assigned to orders by MIDAS, which may differ from the order submission times at the exchange. The magnitude of this difference is typically a few hundred microseconds, and thus in this context the effects of this difference are expected to be minor. Lastly, there are some orders in MIDAS for which no corresponding execution or cancellation message can be identified; these orders are discarded from the dataset. Relative to the Proposing Release, this dataset has been updated to account for a more recent time period, and also reflects several corrections; *see* Proposing Release, 88 FR 3786 at 3842, n.634 (Jan. 20, 2023). First, the data has been corrected to include orders associated with more than one order cancellation message, which were inadvertently excluded from the data in the Proposing Release and may have undercounted orders. Second, the dataset excludes several groups of orders that were included in the Proposing Release. Orders received during the first five minutes of the trading day (2.4% of orders) are excluded to avoid including orders received before there is a valid non-crossed quote following the opening at the primary market center, which are not defined as covered orders under amended Rule 605; *see* amended Rule 600(b)(27). Orders received when the NBBO is locked or crossed (1.6% of orders) are also discarded to simplify the analysis. *See* 2001 FAQs, Question 7, for staff statements regarding covered orders received when the NBBO is locked or crossed. The exclusion of orders received during the first five minutes of the trading day and orders received when the NBBO is locked or crossed is similar to what is done in academic literature; *see, e.g.* Hagströmer, *infra* note 1244. Lastly, we exclude orders associated with more than one order submission message (1.6% of orders). These represent orders that are modified after their submission. Identifying and assigning an outcome to each iteration of a modified order would be complex using MIDAS, so we drop these orders to simplify the analysis. *See* 2001 FAQs, Question 23, for staff statements regarding modified orders. As will be discussed in more detail in reference to each analysis using this MIDAS dataset below, these changes to the MIDAS dataset did not affect the Commission's conclusions from the analyses using MIDAS data relative to the Proposing Release.

[1131] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3843 (Figure 5) (Jan. 20, 2023), where Figure 5 presents the same analysis using data from Mar. 2022 (*see* Proposing Release, 88 FR 3786 at 3842, n.634 (Jan. 20, 2023), for data description). The analysis in the Proposing Release similarly found that odd-lot orders made up a significant percentage of orders (18.2%), though only a small percentage of total submitted share volume (2.8%). Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that odd-lot orders made up a significant percentage of orders, though only a small percentage of total submitted share volume.

[1132] These data include information only about NMLOs, and therefore information about the sizes of market orders and marketable limit orders is not available.

Market commentators have attributed this rise in odd-lot trading to a variety of factors. For example, an increase in the number of high-priced stocks caused order sizes to decrease in these stocks, where trading in larger order sizes is more expensive.[1133] In this vein, one commenter to the Proposing Release stated that ''the fact that many issuers have moved away from stock splits and allowed their stock prices generally to increase'' has contributed to the increase in odd-lot orders.[1134]

Another factor is a rise in algorithmic trading, which chops orders into many smaller orders. Broker-dealers that handle institutional orders often make use of odd-lot orders because of trading algorithms that split larger parent orders into smaller child orders to reduce the market impact of their trades.[1135] High frequency traders also use inside the spread odd-lot orders as a means of probing for hidden liquidity or detecting forthcoming order flow. Academic papers have found evidence that high frequency traders and other institutional investors make up a substantial fraction of odd-lot trades.[1136] Another potential reason for the increase in odd-lot trading is the increasing presence of trading by individual investors, who tend to use smaller order sizes.[1137] All-in-all, by not capturing information related to these orders, preexisting Rule 605 reports have been missing information about potentially important segments of order flow from both individual and institutional investors.

(b) Orders Less Than a Share

Due to the exclusion of fractional orders that are smaller than one share from Rule 605 prior to these amendments,[1138] information about an increasingly important segment of individual investor order flow has been missing from Rule 605 reports. Similar to the increase in odd-lots, one reason for the increase in the use of fractional shares is the increasing presence of trading by individual investors, who tend to use smaller order sizes.[1139] The past few years have seen increasing attention paid to fractional shares, as more and more retail brokers are offering this functionality.[1140] The Commission understands that there are at least two different ways that retail brokers handle fractional trades: first, they rely on their clearing firm, which will often ''round up'' the fractional part of the order and deposit the residual in an internal ''fractional inventory account;'' and second, they execute fractional trades against their own inventory.[1141]

An estimation of the percentage of orders that were excluded from preexisting Rule 605 reporting requirements because they are smaller than one share is difficult, as these orders are executed off-exchange and therefore not included in public datasets. However, an analysis using data from CAT [1142] confirms that levels of fractional trading are mostly the result of individual investor trading: [1143] in August 2023, there were 54.7 million orders for less than one share that eventually received an execution, the majority (65.3%) of which were submitted by accounts attributed to ''Individual Customers.'' [1144] While these fractional orders represented only a small part (around 3.3%) of total executed orders, they represented a much higher percentage (16.4%) of executions received by individual account holders.[1145] Therefore, by not capturing information related to these orders, Rule 605 reports have been missing information about an important segment of individual investor trades.[1146] The Commission estimates

[1133] *See, e.g.,* Odd Facts About Odd Lots, *supra* note 1127.

[1134] *See* Virtu Letter II at 4.

[1135] *See infra* section IX.C.4.a)(1)(b), discussing the practice of broker-dealers handling institutional parent orders as not held orders and splitting them up into child orders.

[1136] *See, e.g.,* Hardy Johnson et al., *Are All Odd-lots the Same? Odd-lot Transactions By Order Submission and Trader Type,* 79 J. Banking & Fin. 1 (2017); Maureen O'Hara et al., *What's Not There: Odd lots and Market Data,* 69 J. Fin. 2199 (2014).

[1137] *See, e.g.,* Bartlett et al. (2022), *supra* note 33; Matthew Healey, *An In-Depth View Into Odd Lots,* Chi. Bd. Options Exch. (Oct. 2021), *available at https://www.cboe.com/insights/posts/an-in-depth-view-into-odd-lots/.* Similarly, one commenter stated that ''advances in technology that have dramatically expanded the number of participants in the market'' is one reason for the increase in odd-lot orders. *See* Virtu Letter II at 7.

[1138] Orders greater than one share can also be fractional. If the fractional order is for more than just a single share (*e.g.,* 2.5 shares), the broker-dealer may internalize the fractional component (0.5 shares) and reroute the whole component (2 shares) to a market center for execution.

[1139] *See, e.g.,* Kevin L. Matthews, *What Are Fractional Shares and How Do They Work?,* Bus. Insider (Sept. 21, 2022), *available at https://www.businessinsider.com/personal-finance/fractional-shares.*

[1140] *See, e.g.,* Rick Steves, *Fractional Shares: Experts Weight in Amid Exploding Retail Trading Volumes,* Fin. Feeds (June 7, 2021, 8:25 a.m. UTC), *available at https://financefeeds.com/fractional-shares-experts-weigh-in-amid-exploding-retail-trading-volumes/,* which shows that trading volume increased substantially (in one case, reported as more than 1,400%, year over year) for brokers after they introduced the use of fractional shares.

[1141] *See, e.g.,* Robert P. Bartlett et al., *A Fractional Solution to a Stock Market Mystery* (working paper Nov. 17, 2023), *available at https://ssrn.com/abstract=4167890* (retrieved from SSRN Elsevier database). As fractional shares fell below the smallest order size category in Rule 605 prior to these amendments, a broker-dealer that currently exclusively executes fractional shares would be a market center, but was not required to file Rule 605 reports.

[1142] This dataset contains CAT records capturing introducing and trading activity in Aug. 2023, including fractional NMS orders that were eventually executed on- and off-exchange. As individual fractional orders are often aggregated into a single representative order before routing and execution, the Commission looked at the information specific to the originating customer orders (designated as MENO orders events in CAT) that were eventually executed, and, separately, examined the information specific to the executions of the orders (designated as MEOT for off-exchange or EX and EOT for on-exchange events in CAT) that could be linked to the fractional MENOs either directly or via a representative order.

[1143] The CAT data used in this analysis have been updated from the Proposing Release for a more recent time period. *See* Proposing Release, 88 FR 3786 at 3844 (Jan. 20, 2023). The analysis in the Proposing Release found that, as of Mar. 2022, orders from individual customers accounted for 92% of all fractional orders (both orders less than a share and orders with fractional components). This number was 70% in Aug. 2023 (65% for fractional orders less than one share). Further analysis reveals that this difference can mostly be attributed to an increase in fractional shares from institutional investor accounts, rather than a decrease in fractional shares from individual investor accounts. This highlights that fractional trading may be an increasingly important segment of institutional order flow as well. However, these differences due to updates to the data did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that fractional orders for less than one share are an important segment of order flow.

[1144] CAT account type definitions are available in Appendix G to the CAT Reporting Technical Specifications for Industry Members, under the field name ''accountHolderType.'' *See* CAT Reporting Tech. Specifications for Indus. Members version 4.0.0 r20 app. G (CAT NMS Plan Participants 2023) (July 31, 2023), *available at https://catnmsplan.com/sites/default/files/2023-09/09.01.2023_CAT_Reporting_Technical_Specifications_for_Industry_Members_v4.0.0r20_CLEAN.pdf.* Account types represent the beneficial owner of the account for which an order was received or originated, or to which the shares or contracts are allocated. Possible types are: Institutional Customer, Employee Account, Foreign, Individual Customer, Market Making, Firm Agency Average Price Account, Other Proprietary, and Error Account. An Institutional Customer account is defined by FINRA Rule 4512(c) as a bank, savings and loan association, insurance company, registered investment company, investment adviser, or any other person with total assets of at least $50 million. An Individual Customer account means an account that does not meet the definition of an ''institution'' and is also not a proprietary account. Therefore, the CAT account type ''Individual Customer'' may not be limited to individual investors because it includes natural persons as well as corporate entities that do not meet the definitions for other account types.

[1145] In terms of notional volume, executed fractional orders, including orders for less than one share and orders greater than one share with a fractional component, make up around 0.003% of total executed dollar volume and 1.2% of executed dollar volume attributed to individual account holders. Furthermore, executed fractional orders for less than one share made up about 7.06 million shares, which is only about 0.001% of total executed share volume.

[1146] One commenter used a sample of TAQ data to show that ''25% of reported trades are for one share, which includes fractional trades for less than one share,'' and stated that ''[t]hus, under current disclosure requirements, retail traders are unable to evaluate market center execution quality for a

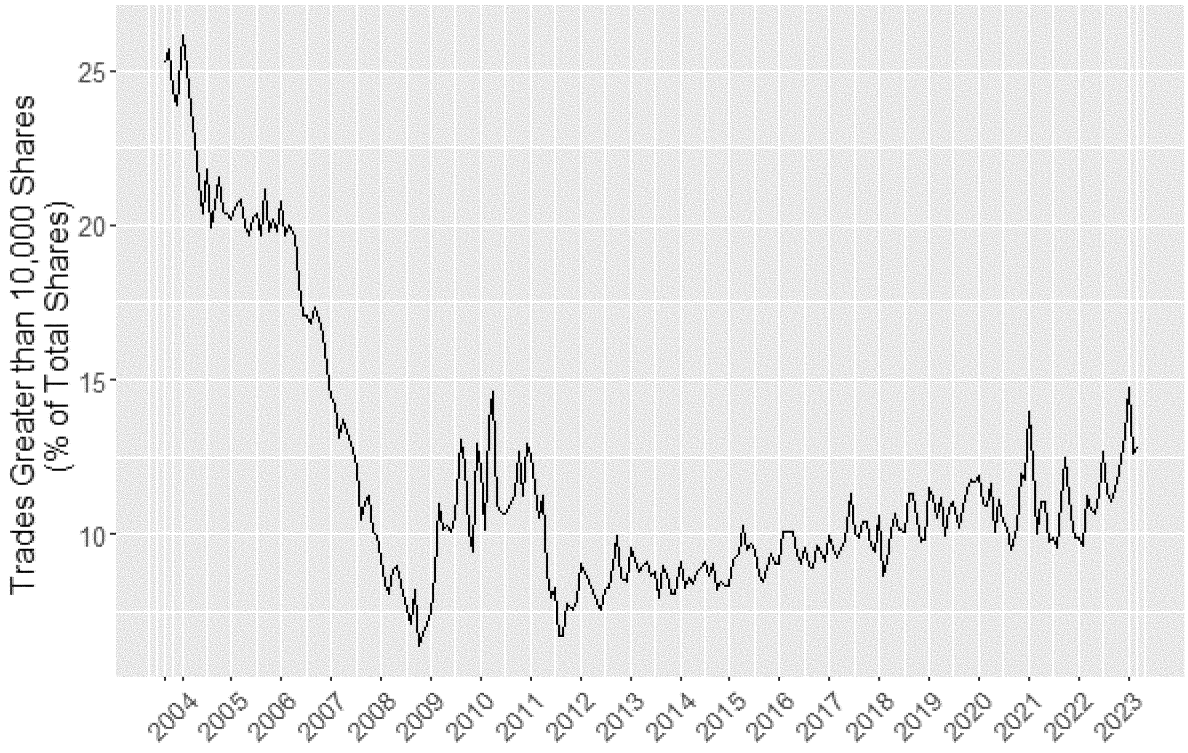
that there are 20 market centers [1147] that exclusively execute fractional orders less than one share and were not required to file Rule 605 reports prior to these amendments due to these orders falling below the smallest order size category in preexisting Rule 605.

(c) Larger-Sized Orders

Due to the exclusion of orders sized larger than 10,000 shares from preexisting Rule 605,[1148] information about another important segment of order flow has been missing from Rule 605 reporting requirements.[1149] The Commission understands that practices have evolved such that most broker-dealers that service institutional investors use SORs to break up these customers' large parent orders into smaller-sized child orders.[1150] As shown in Figure 7,[1151] which plots the number of shares associated with trades that are for 10,000 or more shares as a percent of total executed shares,[1152] the rate of larger-sized trades declined from more than 25% in late 2003 to 12.8% as of March 2023. This decline is likely at least partly due to the increased use of SORs,[1153] though other market changes such as the overall increase in stock prices may also play a part. However, the rate of larger-sized trades has been increasing since August 2011, when the rate of larger-sized trades was around 6.7%.

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Figure 7: Larger-Sized Trades as a Percent of Total Executed Shares, Sep. 2003 to Mar. 2023



This figure plots the monthly number of executed shares associated with trades that are for 10,000 shares or more, summed across all stocks and days in the sample, divided by the total number of executed shares across all stocks and days, using data from TAQ. See supra note 1152 for dataset description.

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majority of their trades.'' Professor Schwarz et al. Letter at 4.

[1147] *See infra* note 1659 for further discussion of this estimate.

[1148] *See supra* note 9 and corresponding discussion describing the exemptive relief provided by the Commission in 2001 for orders with a size of 10,000 shares or greater.

[1149] This was supported by a commenter. *See* Virtu Letter II at 9.

[1150] *See infra* section IX.C.4.a)(1)(b) further discussing the practice of broker-dealers handling institutional parent orders as not held orders and splitting them up into child orders.

[1151] The TAQ data used in this analysis have been updated from the Proposing Release for a more recent time period. *See* Proposing Release, 88 FR 3786 at 3844 (Figure 6) (Jan. 20, 2023), which presents the same analysis for the time period Sept. 2003 to Mar. 2022. Between Mar. 2022 and Mar. 2023, there is a small overall increase in the rate of large-sized trades. Therefore, updates to the TAQ dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that larger-sized orders of 10,000 have been increasing since August 2011.

[1152] This analysis uses data from intraday TAQ Consolidated Trade files for the period from Sept. 2003 to Mar. 2023 for the entire universe of TAQ securities. Plotted is the monthly number of shares associated with trades that are for 10,000 shares or more, divided by the total number of executed shares. The data are limited to trades with sales conditions indicating regular trades, including regular trades with no associated conditions, automatic executions, intermarket sweep orders, and odd-lot trades. *See* NYSE, Daily TAQ Client Specifications (May 20, 2020), *available at https://www.nyse.com/publicdocs/nyse/data/Daily_TAQ_Client_Spec_v3.3.pdf.*

[1153] *See, e.g.,* M. O'Hara, *High Frequency Market Microstructure,* 116 J. Fin. Econ. 257 (2015).

Furthermore, larger-sized orders make up a non-negligible percent of order flow. Figure 6,[1154] which plots the distribution of NMLO sizes in order submission data from MIDAS for the month of Mar. 2023, shows that while NMLOs of 10,000 or more shares made up only 0.27% of order flow in terms of number of orders, they made up around 8.5% of order flow in terms of share volume.[1155] However, some, or possibly most, of these larger-sized orders may be not held to the market, and so would not be required to be included in Rule 605 reports even without the exemptive relief.[1156]

(2) Orders Submitted With Stop Prices

The exclusion of orders with stop prices from the definition of ''covered order'' prior to these amendments has resulted in the exclusion of orders that are likely relevant for investors from preexisting Rule 605 reports. A stop order, also referred to as a stop-loss order, is an order to buy or sell a stock once the price of the stock reaches the specified price, known as the stop price. When the stop price is reached, a stop order becomes a market order, or a limit order in the case of so-called stop limit orders.[1157] The treatment of stop orders varies across broker-dealers and market centers.[1158] At the same time, the execution prices of stop orders are highly sensitive to handling and execution practices, as these orders are more likely to execute when the stock price is in decline and any delay in execution will result in a larger loss (or smaller gain) for the investor.[1159]

The Commission understands that stop orders resting on national securities exchanges have been uncommon, and the vast majority of stop orders are handled by broker-dealers.[1160] Some national securities exchanges have eliminated this order type from their rule book.[1161] Furthermore, the use of stop orders has typically been associated with individual investors,[1162] who may be less likely to have the resources to actively monitor their orders, and thus use stop orders to try to protect a gain or to limit potential losses of a currently held position.[1163] Table 3 [1164] breaks down a sample of stop loss order volume by account type and stop loss order type using CAT data for Mar. 2023.[1165] The data confirm that the use of stop orders by institutional investors is very rare (only 0.25% of market and 0.0011% of limit orders are submitted with stop prices), while their use is relatively more common for individual investors, particularly for market orders, around 4.91% of which are submitted with stop prices.[1166] The data also confirm that, while most stop orders are triggered by the last sale price (''Stop/Stop Limit''), there is also nontrivial order flow associated with other trigger events as well, such as the

[1154] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons discussed in *supra* note 1131. *See* Figure 5 in the Proposing Release, 88 FR 3843 (Jan. 20, 2023). The analysis in the Proposing Release similarly found that larger-sized orders of 10,000 or more shares make up a small percent of order flow in terms of orders (2.5%), but a non-negligible percent of order flow in terms of share volume (7.75%). Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that larger-sized orders of 10,000 or more shares make up a small percent of order flow in terms of number of orders, but a non-negligible percent of order flow in terms of share volume.

[1155] This result supports the statement of one commenter, that ''while orders greater than 9,999 shares may comprise a relatively small number of total orders, when viewed through the lens of total shares, they comprise a meaningful amount of the total share volume.'' Virtu Letter II at 9.

[1156] *See supra* note 1003 and accompanying text discussing broker-dealers' requirements under Rule 606(b)(3) to provide individualized reports of execution quality upon request for not held orders.

[1157] *See, e.g.,* SEC, *Types of Orders*, Investor.gov, *available at https://www.investor.gov/introduction-investing/investing-basics/how-stock-markets-work/types-orders* and the definitions of stop order and stop limit order in FINRA Rule 5350(a), *available at https://www.finra.org/rules-guidance/rulebooks/finra-rules/5350*. The stop price can be the last sale price, or a quotation in the case of stop on quote or stop limit on quote orders. The stop price may also be permitted to increase or decrease by a predetermined amount or formula in the case of trailing stop and trailing stop limit orders.

[1158] For example, one broker-dealer stated that some of the market centers to which it routes orders may impose price limits to prevent stop orders from being triggered by potentially erroneous trades, and that these price limits vary by market center. *See Trading FAQs: Order Types,* Fidelity, *available at https://www.fidelity.com/trading/faqs-order-types.* Another brokerage firm states that, depending on the market center to which a stop limit order is presented, a stop limit order can be activated as a limit order using either a transaction or quotation as the triggering event. *See Best Execution of Equity Securities,* UBS (Jan. 2023), *available at https://www.ubs.com/content/dam/static/wmamericas/bestexecution.pdf.*

[1159] *See, e.g., Stop Orders: Factors to Consider During Volatile Markets,* FINRA: Investor Insights (June 28, 2016), *available at https://www.finra.org/investors/insights/stop-orders-factors-consider-during-volatile-markets*; *see also* FIF Letter at 9, stating that ''[a] stop order is often triggered under market conditions that reflect a market moving adverse to the order. For example, the triggering of a buy stop limit order would reflect a rising market, which could be detrimental to the execution quality for that order.''

[1160] *See, e.g.,* Memorandum from SEC, Div. of Trading and Mkts. to Equity Market Structure Advisory Committee (Jan. 26, 2016), *available at https://www.sec.gov/spotlight/equity-market-structure/issues-affecting-customers-emsac-012616.pdf* (citing NYSE Order Type Usage Chart illustrating that stop orders, along with good-til-canceled, agency cross and manual orders, accounted for only 0.19% of total matched volume for Q3 2015 and Q4 2015) (''SEC Division of Trading and Markets Memorandum''); *see also How to Survive the Markets Without Stop-Loss Orders,* NASDAQ (Dec. 2, 2015, 10:58 a.m. EST), *available at https://www.nasdaq.com/articles/how-survive-markets-without-stop-loss-orders-2015-12-02*, stating that stop orders represent around 2% of all orders placed on national securities exchanges.

[1161] *See, e.g.,* Securities Exchange Act Release No. 76649 (Dec. 15, 2015), 80 FR 79365 (Dec. 21, 2015) (SR–NYSE–2015–60) (''NYSE Notice''); Securities Exchange Act Release No. 76655 (Dec. 15, 2015), 80 FR 79382 (Dec. 21, 2015) (SR–NYSEMKT–2015–103).

[1162] *See, e.g.,* Annie Massa & Sam Mamudi, *BlackRock Calls for Halting Stock Market to Avoid Volatility*, Bloomberg Bus. (Oct. 7, 2015), *available at http://www.bloomberg.com/news/articles/2015-10-07/blackrock-calls-for-halting-the-stock-market-to-avoid-volatility* (citing industry concerns with ''the widespread use of stop orders by retail investors'').

[1163] *See, e.g.,* SEC Division of Trading and Markets Memorandum, *supra* note 1160. Meanwhile, professional or institutional investors are more likely to have the resources to be able to actively monitor their orders, and are therefore less likely to use stop orders. *See, e.g.,* How to Survive the Markets Without Stop-Loss Orders, *supra* note 1160.

[1164] The CAT data used in this analysis have been updated from the Proposing Release for a more recent time period. *See* Table 4 of the Proposing Release, 88 FR 3786 at 3845 (Jan. 20, 2023). The results of the analysis in the Proposing Release are similar to those presented here, except that the analysis in the Proposing Release found that 49.4% of institutional stop/stop limit orders were market orders and 37.8% were limit orders in Mar. 2022; the results in Table 3 for Mar. 2023 show a reverse pattern, in which the majority of institutional stop/stop limit orders are limit (63.4%) and relatively fewer are market orders. A closer inspection of the data revealed that this reversal is driven by the order volume of several market participants. The analysis in the Proposing Release similarly found that a significant percentage of institutional stop orders are limit orders. Therefore, the updates to the dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that a significant percentage of institutional stop orders have limit prices, as discussed in note 1166 *infra*.

[1165] This analysis uses data from CAT for all NMS stocks for the period of Mar. 2023 that originated either from Institutional Customer or from Individual Customer accounts. Stop orders are identified using the reporting requirements for stop orders in the CAT Reporting Technical Specifications for Industry Members. *See* CAT Reporting Tech. Specifications for Indus. Members version 4.0.0 r18 (Dec. 16, 2022), *available at https://www.catnmsplan.com/sites/default/files/2022-12/12.16.2022_CAT_Reporting_Technical_Specifications_for_Industry_Members_v4.0.0r18_CLEAN.pdf.*

[1166] One commenter stated that ''a material percentage of stop orders have a limit price and a material percentage of stop orders do not have a limit price.'' FIF Letter II at 2. Table 4 in the Proposing Release showed that, as of Mar. 2022, 0.0003% of institutional and 0.03% of individual limit orders consisted of orders with stop prices. At the same time, stop orders with limit prices made up 38.7% of institutional stop orders, and 12.4% of individual stop orders. *See* Proposing Release, 88 FR 3786 at 3845 (Jan. 20, 2023). Table 3 shows similar numbers for Mar. 2023, with 0.0011% of institutional and 0.02% of individual limit orders consisting of orders with stop prices, and 63.9% of institutional and 11.0% of individual stop orders consisting of stop orders with limit prices. These numbers show that, while stop orders with limit prices are generally a small percentage of total orders, they constitute a significant percentage of orders with stop prices, particularly for institutional investors.

quotation (''Stop on Quote/Stop Limit on Quote'').[1167]

Table 3: Stop Order Volume by Account and Order Types, Mar. 2023

		Types of Stop Orders (% of Total Stop Orders)			
Investor and Order Type	**Orders with Stop Prices (% of Total Orders)**	**Stop / Stop Limit**	**Stop on Quote / Stop Limit on Quote**	**Trailing Stop / Trailing Stop Limit**	**Total**
Institutional					
Market	0.25%	31.4%	0.2%	4.5%	36.1%
Limit	0.0011%	63.4%	0.2%	0.2%	63.9%
Individual					
Market	4.91%	70.0%	8.7%	10.3%	89.0%
Limit	0.02%	9.1%	1.5%	0.4%	11.0%

This table shows the percentage of orders that are submitted with stop prices (as a percentage of total orders) using a sample of CAT data for all NMS stocks from Mar. 2023. Percentages are calculated as the number of orders submitted with stop prices summed across all stocks and days in the sample, divided by the total number of submitted orders summed across all stocks and days. These percentages are broken down into whether these orders were submitted by institutional or individual customer accounts, and whether the orders are market or limit orders submitted with stop prices. Also shown is a breakdown of stop order submission volume according to six common types of stop orders. See supra note 1165 for information on the dataset and identification of stop orders.

(3) Non-Exempt Short Sale Orders

Prior to these amendments, Commission staff had taken the position that staff would view all non-exempt short sale orders as special handling orders.[1168] As a result, these orders have not been included in prior Rule 605 statistics, which has resulted in the exclusion of a large portion of orders that are likely relevant for market participants.

Non-exempt short sale orders are orders that are subject to price restrictions under Rule 201 of Regulation SHO,[1169] which contains a short sale circuit breaker that, when triggered by a price decline of 10% or more from a covered security's prior closing price, imposes a restriction on the price at which the covered security may be sold short (*i.e.,* must be above the current national best bid). Once triggered, the price restriction will apply to short sale orders in that security for the remainder of the day and the following day, unless the short sale order is ''short exempt.'' [1170] Since a non-exempt short sale that is subject to a price restriction is only allowed to take place at least one tick above the NBB, these could be ''orders to be executed on a particular type of tick or bid,'' which would exclude them from the definition of ''covered order.'' [1171] The exclusion of tick-sensitive orders from preexisting Rule 605 reporting requirements was designed so that these orders did not skew execution quality statistics, as the prevention of these orders from executing at the best bid would likely lead to lower execution quality statistics (*e.g.,* negative price improvement and higher effective spreads) as compared to other orders.

In the years since Rule 201's adoption, it has become clear that Rule 201 price test restrictions are not often triggered. Between April 2015 and November 2023, a Rule 201 trigger event only occurred on 1.8% of trading days for an average stock.[1172] Around 15.4% of Rule 201 triggers occur the day after a previous trigger event, and around 45.4% occur within a week after a previous trigger event. These statistics imply that Rule 201 triggers tend to be relatively rare, and clustered around a few isolated events. This has resulted in a significant portion of non-exempt short sale orders being excluded from prior Rule 605 statistics when Rule 201 was not triggered, at which point a price test restriction was not in effect and their exclusion would not have skewed execution quality statistics.

(4) Orders Submitted Pre-Opening/Post-Closing

When Rule 605 was first adopted, the Commission explained the decision to exclude orders submitted outside of regular trading hours by stating that there are substantial differences in the nature of the market between regular trading hours and after-hours, and therefore orders executed at these times should not be blended together.[1173] However, the preexisting exclusion of

[1167] *See, e.g.,* FIF Letter II at 2, confirming ''that a material percentage of stop orders are triggered based on a change in the NBBO (in most cases, but not always, the opposite-side quote) and a material percentage of stop orders are triggered based on a change in the last sale price.''

[1168] *See* 2013 FAQs.

[1169] *See supra* note 299 for more information about Rule 201 of Regulation SHO.

[1170] ''Short exempt'' orders include certain short sale orders from market makers and short sales priced above the current national best bid at the time of submission. *See* 17 CFR 242.201(c) and (d).

[1171] *See* prior 17 CFR 242.600(b)(22).

[1172] This analysis looked at the percentage of trading days that experienced a Rule 201 trigger event for the period Apr. 2015 and Nov. 2023 for all listed stocks on NYSE or NASDAQ exchanges and then averaged across stocks. The Commission restricted its sample to common stocks identified in CRSP (share code 10 or 11), from CRSP 1925 US Stock Database, Ctr. Rsch. Sec. Prices, U. Chi. Booth Sch. Bus. (2022). The Commission also excluded financial stocks (SIC code 6000–6999), as financial stocks may have different properties than other types of stocks, including characteristics related to short selling (*e.g.,* Markus K. Brunnermeier & Martin Oehmke, *Predatory Short Selling,* 18 Rev. Fin. 2153 (2014)). Rule 201 circuit breaker data retrieved from *ftp://ftp.nyxdata.com/NYSEGroup SSRCircuitBreakers/* and *ftp://ftp.nasdaq trader.com/SymbolDirectory/shorthalts/.* A similar analysis was included in the Proposing Release and found substantially similar results. *See* Proposing Release, 88 FR 3786 at 3846 (Jan. 20, 2023).

[1173] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75421 (Dec. 1, 2000).

all orders submitted outside of regular market hours from the definition of ''covered order,'' [1174] in addition to excluding orders that execute outside of regular hours, also extended to orders that, while submitted outside of regular market hours, are only eligible to execute during regular market hours. While these orders represent only a small portion of order flow, they represent a relatively high concentration of orders from individual investors. Therefore, the exclusion of all orders submitted outside of regular trading hours from Rule 605 prior to these amendments may have led to the exclusion of an important segment of individual investor orders.

When Rule 605 was first adopted, after-hours markets were still mostly the purview of institutional investors, but a growing number of broker-dealers had recently begun providing their retail customers with the ability to have their orders directed to electronic communication networks (ECNs) after the major markets close for the day. The growth in the availability of after-hours trading for individual investors raised concerns over, and heightened awareness of, the differences in execution quality for after-hours trades, which tend to be much riskier due to lower liquidity levels and higher volatility in after-hours markets.[1175]

Along with an increase in access to after-hours trading, the late 1990s and early 2000s saw an increase in the prevalence of online brokerages, in which individual investors in particular were given newfound access to order entry systems. Early research into the rise of online brokerages describes a shift from a system in which retail brokers ''communicate buy/sell recommendations to clients over the telephone'' (presumably during regular working hours), to a system in which individual investors have ''round-the-clock access to trading systems and account information.'' [1176] Logically, as investors make use of the ''round-the-clock'' access offered by online brokerages, the number of orders submitted outside of regular market hours has likely increased over the preceding decades. However, not all orders submitted after hours are eligible to trade in after-hours markets, which continues to be the case even in today's market. For example, some broker-dealers' platforms allow customers to submit orders at any time, but unless the customer requests to trade during extended hours and the security is eligible to trade as such, the order will only be executed during regular market hours.[1177] Since these orders are not intended, and in many cases are not eligible, to execute outside of regular trading hours, these orders may not be subject to the same concerns that drove the Commission to exclude orders submitted outside of trading hours from Rule 605 reporting requirements in the Rule 11Ac1–5 Adopting Release.

To estimate the amount of orders that are submitted outside of regular trading hours, data from the Tick Size Pilot B.I Market Quality dataset [1178] were analyzed to break order volume down into different trading sessions according to when the order was eligible to trade.[1179] The Commission considered only those orders that have an effective time during regular market hours to be eligible for Rule 605 reporting, and excluded orders that were otherwise excluded from preexisting Rule 605 reporting requirements, *i.e.,* because they are an excluded order type or size. The Commission found that a small fraction of orders are effective outside of regular market hours (1.3%), while the vast majority of orders (98.7%) are effective during regular market hours.

At least some of these orders, while submitted outside of regular market hours, execute during regular trading hours, *e.g.,* because they are NMLOs that are only executable during regular trading hours.[1180] In order to estimate the extent to which this occurs, a sample of 400 stocks [1181] using CAT data from Q1 2023 [1182] was analyzed to examine how the submission volume of executable NMLOs submitted outside of regular trading hours [1183] compares to the full sample of executable NMLO

[1174] *See* prior 17 CFR 242.600(b)(22), (77).

[1175] *See, e.g.,* SEC, Div. of Mkt. Regul., *Special Study: Electronic Communication Networks and After-Hours Trading* (June 2000), *available at https://www.sec.gov/news/studies/ecnafter.htm.*

[1176] Jennifer Wu et al., *Online Trading: An internet Revolution,* 4 Sloan Sch. of Mgmt. Mass. Inst. of Tech. Rsch. Notes (1999).

[1177] *See, e.g., Extended Hours Overview,* Charles Schwab, *available at https://www.schwab.com/public/schwab/nn/qq/about_extended_hours_trading.html* (2023); *Extended-Hours Trading,* Robinhood, *available at https://robinhood.com/us/en/support/articles/extendedhours-trading/* (last visited Jan. 29, 2024, 1:21 p.m.).

[1178] *See supra* note 1115 for dataset description. This analysis was included in the Proposing Release; *see* Proposing Release, 88 FR 3786 at 3846 (Jan. 20, 2023).

[1179] These trading sessions include (1) regular hours only; (2) extended hours only; (3) both regular and extended hours with an effective time during regular market hours; and (4) both regular and extended hours with an order effective time during extended hours. *See* Tick Size Pilot FAQs, Q4.11, *supra* note 1116.

[1180] Most retail brokers do not permit market orders during extended hours trading. *See, e.g.,* Extended Hours Overview and Extended-Hours Trading, *supra* note 1177.

[1181] This sample of stocks was constructed using data as of market close on Dec. 30, 2022, using the same methodology as in the Proposing Release. Market capitalization and price information were collected from the Center for Research in Security Prices (CRSP), and stocks with volume less than 1,000 shares, stocks with a closing price of less than $2, and dual-class shares were excluded. For each of the four market capitalization groups (less than or equal to $100 million, greater than $100 million and less than or equal to $1 billion, greater than $1 billion and less than or equal to $10 billion, greater than $10 billion), stocks were sorted by price and assigned to four equally-sized buckets. Within each sorted price bucket, 25 stocks were chosen at evenly spaced intervals, yielding 100 stocks per group for a total of 400 stocks. As a hypothetical example, from a price-sorted bucket with 50 stocks every second stock would be chosen to get 25 total stocks. From this initial sample of 400 stocks, four stocks were replaced due to being delisted during the Q1 2023 analysis period, and one stock was replaced due to abnormally high volume.

[1182] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1181 for information about how the 400-stock sample was selected. The CAT data consist of all orders eligible to trade during regular hours during Q1 2023 that were received for the 400 stocks at four types of reporting entities: (1) Exchanges, (2) Wholesalers, (3) Alternative Trading Systems (ATSs) and (4) Broker-Dealers. We excluded multi-day orders, orders received when the NBBO was locked or crossed, and all orders with handling instructions, with the exception of intermarket sweep orders (ISOs) for on-exchange orders, and with the exception of orders with handling codes CASH, DIR, DISQ, DNR, DNRT, RSV, and STP, for broker-dealer and off-exchange orders. Certain on-exchange TIF codes are also excluded, including Fill or Kill, Good For Seconds, At the Close, At the Open, Auction or Kill, and Auction Only Order. For more information on order handling codes in CAT, *see* CAT Reporting Tech. Specifications for Indus. Members version 4.0.0 r18 (Dec. 16, 2022), *available at https://www.catnmsplan.com/sites/default/files/2022-12/12.16.2022_CAT_Reporting_Technical_Specifications_for_Industry_Members_v4.0.0r18_CLEAN.pdf.* We also exclude a small percentage of orders that had more shares traded than the original order size in its CAT lifecycle. We also excluded orders that had order modifications (3.4% of orders). For ATSs, we additionally excluded ATS-specific order types that were determined to not be eligible for Rule 605 reporting. For Broker-Dealer order originations, we excluded orders received from the following account holder types: Employee Account, Market Making, Other Proprietary, and Error Account of the Firm. For both of the Broker-Dealer and Wholesaler route acceptances, we kept order acceptances if the CAT Reporter ID associated with the CRD is not an ATS. Execution times and effective spreads are measured relative to the time of order receipt by the market entity. Orders received in off trading hours were benchmarked to the first non-locked and crossed quote in the stocks' listing market on the next trading day. For simplicity and without loss of generality, the analysis considers only NMLOs that are priced at the quote or better, *i.e.,* NMLOs that are immediately executable upon order receipt. Limit orders are classified as marketable, at-the-quote, below-the-midpoint, at-the-midpoint, or beyond-the-midpoint, based on the distance of their limit price from the NBBO or NBBO midpoint at the time of order receipt.

[1183] The definition of marketability for the purposes of this analysis for pre-open orders is determined using the NBBO at the time that primary listing market has disseminated its first firm, uncrossed quotations in the security, such that orders to be executed prior to this time opening price are excluded. *See supra* section III.A.1.b) for more information about defining the marketability of orders submitted outside of regular market hours.

submission volume.[1184] This analysis confirms that pre-open orders make up a small percentage of order volume, representing around 1.3% of total submitted shares (0.4% of total submitted orders). However, further analysis reveals that these orders contain a higher concentration of orders associated with Individual Customer accounts. Specifically, for those pre-open orders that could be identified as originating from either individual or institutional customer accounts,[1185] 81.8% of these pre-open orders (82.6% of pre-open shares) originated from individual customer accounts. In comparison, individual customer accounts were responsible for just 1.5% of orders (1.7% of shares) of total individual and institutional customer account originations.

This is consistent with the idea that at least some of this order flow represents orders that are submitted by individual investors outside of market hours, *i.e.,* via online brokerage accounts, but not necessarily with the intention to engage in after-hours trading.

(c) Required Information

In addition to decreasing the coverage of Rule 605, subsequent market changes since the initial adoption of Rule 605 may have also decreased the relevance of some of the metrics required to be reported by preexisting Rule 605 reporting entities. This section will discuss how market changes may have affected, or will likely affect in the near future, aspects of several such metrics, including the definition of round lots for order size categories, the granularity of metrics related to time-to-execution, and the use of a five-minute time horizon for realized spreads.

(1) Order Size Categories

Preexisting Rule 605 defined order size categories in terms of numbers of shares. Given that share prices and thus the notional value of orders can differ dramatically, defining a size category in terms of number of shares has disadvantages.[1186] Figure 1 shows that the vast majority of orders are for a notional value of less than $100,000, and Figure 2 shows that this is the case for stocks across all different price levels. This implies that, for a $500 stock in which a $100,000 order is equivalent to an order of only 200 shares, nearly all covered orders were clustered within preexisting Rule 605's smallest order size category of 100 to 499 shares.[1187] Clustering all covered orders into a single category would have limited market participants' ability to use these categories to compare across orders of different sizes in such higher-priced stocks. Furthermore, combined with the exclusion of orders for less than 100 shares, defining order sizes in terms of number of shares led to the exclusion of many orders in higher-priced stocks. For example, a 99-share odd-lot in a $500 stock already has a notional value of $49,500, which is greater than the notional value of around 93% all orders according to Figure 1. Similarly, one industry analyst stated that the definition of order size categories in terms of number of shares, together with the exclusion of orders of less than 100 shares under preexisting Rule 605,[1188] has led to the exclusion of more orders with low dollar values as the average stock price increases.[1189]

Lastly, the Commission's 2020 adoption of the MDI Rules included a new definition of ''round lot'' that would have caused some round lots to be excluded from reporting requirements, absent an update to Rule 605's order size categories.[1190] Specifically, the order size categories as defined under preexisting Rule 605, which excluded orders with fewer than 100 shares, would have excluded a portion of round lots for stocks with prices greater than $250.[1191]

(2) Non-Marketable Limit Order Categories

As a result of the categorization of NMLOs under preexisting Rule 605, execution quality statistics for some NMLOs may have included orders whose executions are more likely to depend on their limit prices and price movements in the market, and excluded orders whose executions are more likely to depend on their handling by the market center.[1192]

Given that the aim of Rule 605 is to enable investors to compare and evaluate execution quality among different market centers,[1193] Rule 605 reports are designed to include only orders that provide a basis for meaningful comparisons across measures of execution quality.[1194] Depending on their characteristics,

[1184] The CAT data used in this analysis have been updated since the Proposing Release for a more recent time period and to include the full sample of executable NMLOs described in note 1182 *supra.* A similar analysis in the Proposing Release used CAT data for a sample of 390 stocks from Mar. 2021 to compare NMLOs submitted outside of regular trading hours that were designated as only eligible to trade during regular trading hours to the volumes and characteristics of NMLOs submitted during a sample time window from 9:40 a.m. to 10:40 a.m. *See* Proposing Release, 88 FR 3786 at 3847 (Jan. 20, 2023). These updates to the data and methodology did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that pre-open orders represent a small percentage of order flow, contain a high concentration of individual investor orders, and likely have some differences in execution profiles as compared to orders submitted during regular market hours.

[1185] As the account type (*i.e.,* individual or institutional) data field is only available upon order origination and is not transferred to the executing market center, the Commission was not able to differentiate individual investors in the CAT data for exchanges.

[1186] *See* Virtu Letter II at 5, stating that ''Rule 605's approach to bucketing orders solely by share quantity yields skewed comparisons because it fails to take into account the notional value of orders.''

[1187] *See* prior 17 CFR 242.605(a)(1); *see also supra* note 1121 and corresponding text for a definition of the order size categories included in Rule 605 reporting requirements prior to these amendments. Consider also that a 400-share order in a $500 stock would already be considered a large ''block'' order according to some Regulation NMS rules. *See, e.g.,* Rule 606(a)(1) of Regulation NMS (requiring reports on the routing of customer orders) and prior Rule 600(b)(25) of Regulation NMS (defining ''customer order'' to exclude an order with a market value of $200,000 or more); 17 CFR 242.604(b)(6) (providing an exception for orders of block size from required limit order display) and prior Rule 600(b)(12) of Regulation NMS (defining ''block size'' as, in part, an order for a quantity of stock having a market value of at least $200,000). Therefore, in reports under preexisting Rule 605, all non-block covered orders in such a stock were grouped in the smallest order size category.

[1188] *See supra* section IX.C.3.b)(1)(a) for a discussion of the exclusion of orders that are less than 100 shares from preexisting Rule 605 reporting requirements.

[1189] *See* Phil Mackintosh, *Modern Retail Needs Modern Rules,* NASDAQ (May 27, 2021, 11:54 a.m. EDT), *available at https://www.nasdaq.com/articles/modern-retail-needs-modern-rules-2021-05-27/.*

[1190] *See supra* note 1016 for a definition of these tiers.

[1191] In addition, even prior to the implementation of the MDI Rules, a small number of NMS stocks have a round lot size smaller than 100. Until the round lot definition adopted pursuant to the MDI Rules is implemented, round lots continue to be defined in exchange rules. *See* MDI Adopting Release, 85 FR 16726 at 16738 (Mar. 24, 2020). For most NMS stocks, a round lot is defined as 100 shares. According to TAQ Data, as of Mar. 2023, 11 stocks had a round lot size other than 100. Nine stocks had a round lot of 10 and two stocks had a round lot of one.

[1192] The execution quality of NMLOs is relevant for both individual and institutional investors. Studies have shown that both institutional and individual investors likely make use of NMLOs. One academic study, using data on retail orders between 2003 and 2007 from two OTC market centers, estimated that NMLOs made up around 39% of individual investor order flow. *See* Eric K. Kelley & Paul C. Tetlock, *How Wise are Crowds? Insights from Retail Orders and Stock Returns,* 68 J. Fin. 1229 (2013). Other academic papers suggest that NMLO usage by institutional investors may also be high. *See, e.g.,* Amber Anand et al., *Empirical Evidence on the Evolution of Liquidity: Choice of Market Versus Limit Orders by Informed and Uninformed Traders,* 8 J. Fin. Mkt. 288 (2005); Ron Kaniel & Hong Liu, *So What Orders Do Informed Traders Use*?, 79 J. Bus. 1867 (2006).

[1193] *See supra* note 13.

[1194] *See, e.g.,* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75421 (Dec. 1, 2000), stating that Rule 11Ac1–5 ''contains several conditions and exclusions that are intended to limit its scope to those orders that provide a basis for meaningful and comparable statistical measures of execution quality.''

execution quality statistics for some NMLOs may be less meaningful because their executions depend more on the order's limit price and price movement in the market than on handling by the market center. In preexisting Rule 605, the exclusion of NMLOs with limit prices more than $0.10 outside the NBBO (''away-from-the-quote'' NMLOs) from reporting requirements [1195] was intended to eliminate NMLOs with less meaningful execution quality statistic.[1196] The ''near-the-quote'' limit order category, consisting of NMLOs that were outside the NBBO by no more than 10 cents, was meant to include limit orders that are submitted away from the NBBO, but that still have a relative likelihood of being executed (hence the maximum distance requirement from the NBBO).[1197]

However, the likelihood of execution of a NMLO greatly depends on the movement of the NBBO, such that even an order submitted within 10 cents of the NBBO may never receive an opportunity to be executed if that order never touches the NBBO (*e.g.,* if prices were to move away from that order immediately after submission), and an order that is submitted further than 10 cents may indeed eventually execute if prices move towards the order. Figure 8 [1198] presents data on the fill rates of NMLO orders,[1199] broken down by NMLO type, including away-from-the-quote, near-the-quote, and at-the-quote NMLOs, along with several categories of inside-the-quote NMLOs depending on their distance from the midpoint (below-the-midpoint, at-the-midpoint, and beyond-the-midpoint),[1200] using a sample of MIDAS NMLO submission data.[1201] The figure shows that near-the-quote and away-from-the-quote NMLOs appear very similar in terms of fill rates (0.27% and 0.02%, respectively), particularly compared to other types of NMLOs (*e.g.,* inside-the-quote NMLOs have an average fill rate of around 0.36% to 3.57%). The fact that near-the-quote and away-from-the-quote NMLOs have similar fill rates is consistent with the possibility that the exclusion of NMLOs priced more than 10 cents away from the NBBO under preexisting Rule 605 was based on a threshold that does not optimally differentiate between orders that have a meaningful chance to execute. Meanwhile, orders that never have a meaningful opportunity to execute (*e.g.,* because they never touch the NBBO) may have been included in Rule 605 statistics prior to these amendments.

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[1195] *See* prior 17 CFR 242.600(b)(14), (37); prior 17 CFR 242.605(a)(1).

[1196] *See, e.g.,* Disclosure of Order Routing and Execution Practices (Proposing Release), 65 FR 48406 at 48414 (Aug. 8, 2000), stating that ''Commission preliminarily believes that the rule's statistical measures (*e.g.,* fill rates and speed of execution) for [limit orders with limit prices that are more than $0.10 outside the consolidated BBO at the time of order receipt] may be less meaningful because they would be more dependent on the extent to which the orders' limit prices were outside the consolidated BBO (and movements in market prices) than on their handling by a market center.''

[1197] In preexisting Rule 605, the categorization of a NMLO as a ''near-the-quote'' NMLO was based on the NBBO as of the time of order receipt. *See* prior 17 CFR 242.600(b)(37).

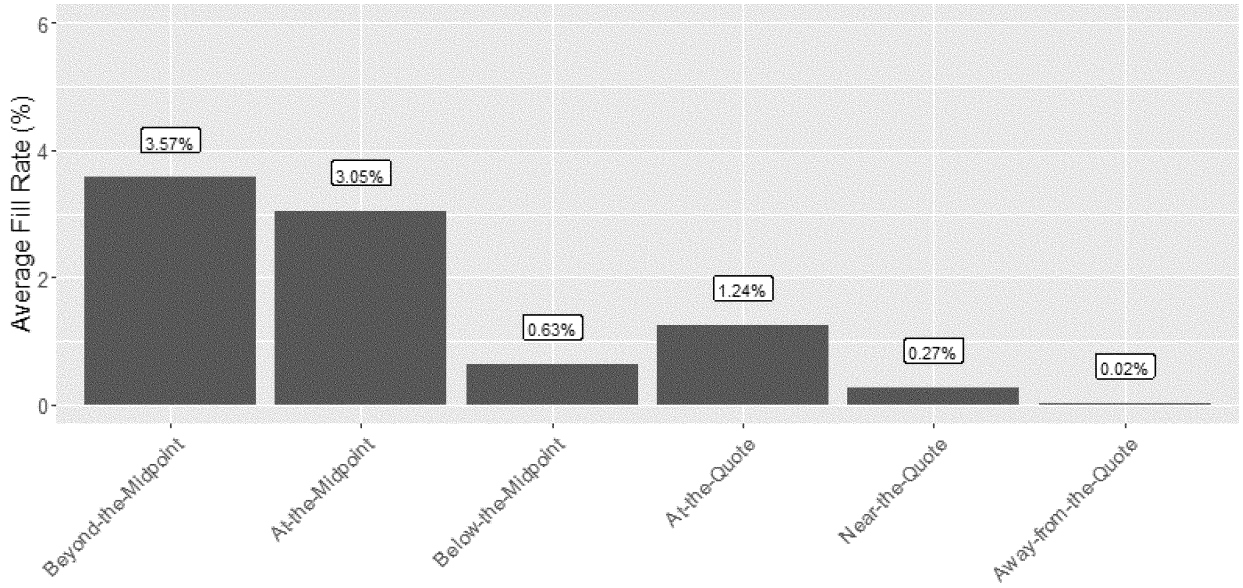
[1198] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3849 (fig. 8) (Jan. 20, 2023). The fill rates in the analysis in the Proposing Release are somewhat higher—beyond-the-midpoint (5.07%), at-the-midpoint (4.96%), below-the-midpoint (2.66%), at-the-quote (2.89%), near-the-quote (0.61%), and away-from-the-quote (0.18%)—compared to those in the updated analysis in Figure 8. However, it remains the case that near-the-quote and away-from-the-quote NMLOs have similarly low fill rates compared to other types of NMLOs. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that the exclusion of away-from-the-quote NMLOs and the inclusion of near-the-quote NMLOs under preexisting Rule 605 was based on a threshold that does not optimally differentiate between orders that do and do not have a meaningful chance to execute.

[1199] Due to the exclusion of orders with more than one submission message from the MIDAS dataset as described in *supra* note 1130, an analysis using this data may overestimate fill rates. This is because many of the orders associated with more than one submission message are so-called ''cancel/replace'' orders, in which an existing order is cancelled and replaced with a modified order, such as an order with a different price. The exclusion of these orders will thus tend to exclude more cancellations than executions, leading to higher fill rates. An alternate analysis, rather than dropping order ids (''oids'') with multiple submission messages, summed submission volume by stock-day-exchange-oid and assigned to this volume the price at the time of first submission. The fill rates resulting from this alternative analysis differ from those in Figure 8 by less than 0.01 percentage points; thus, the Commission's conclusions from this analysis are not affected by the exclusion of orders with multiple submission messages.

[1200] These categories of NMLOs are defined as follows. ''Beyond-the-midpoint'' NMLOs consist of, for sell orders, NMLOs with limit prices lower than the midpoint but higher than the NBB, and, for buy orders, NMLOs with limit prices higher than the midpoint but lower than the NBO. ''At-the-midpoint'' NMLOs consist of NMLOs with limit prices equal to the NBBO midpoint. ''Below-the-midpoint'' NMLOs consist of, for sell orders, NMLOs with limit prices higher than the midpoint but less than the NBO and, for buy orders, NMLOs with limit prices lower than the midpoint but higher than the NBB. ''At-the-quote'' NMLOs consist of, for sell orders, NMLOs with limit prices equal to the NBO and, for buy orders, NMLOs with limit prices equal to the NBB. ''Near-the-quote'' NMLOs consist of, for sell orders, NMLOs with limit prices worse (*i.e.,* higher) than the NBO by no more than $0.10 and, for buy orders, NMLOs with limit prices worse (*i.e.,* lower) than the NBB by no more than $0.10. ''Away-from-the-quote'' NMLOs consist of, for sell orders, NMLOs with limit prices worse (*i.e.,* higher) than the NBO by more than $0.10 and, for buy orders, NMLOs with limit prices worse (*i.e.,* lower) than the NBB by more than $0.10.

[1201] The distribution of orders into various NMLO categories may change following the implementation of the MDI Rules. Specifically, the NBBO is anticipated to narrow for stocks priced above $250 as a result of the new definition of round lots, which will likely decrease the number of inside-the-quote NMLOs and increase the number of quotes at or outside of the quotes for these stocks. *See supra* section IX.C.1.c)(2). However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average fill rates of these NMLO categories.

Figure 8: Fill Rates of NMLOs, Mar. 2023



This figure plots the fill rates of order flow that can be categorized into various NMLO categories, using order submission data from MIDAS. Fill rates are calculated as the number of shares executed of a given NMLO type, summed across all stocks and days in the sample, divided by the number of shares submitted of a given NMLO type, summed across all stocks and days. See supra note 1130 for a description of the dataset and supra note 1200 for definitions of the NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1201 and section IX.C.1.c)(2).

To get an idea of the extent to which these orders were included in Rule 605 statistics prior to these amendments, Figure 9 [1202] breaks down the sample of MIDAS NMLO submission data [1203] into NMLO types.[1204] According to Figure 8, more than 99% of near-the-quote NMLOs do not execute, which, according to Figure 9 represents around 29.3% of total submission volume.[1205] While it is possible that some of these orders did not execute because of their handling by the market center, it is unlikely that this is the case for all of them, and likely that some of the lack of fills was the result of other factors, such as price movements or cancellations by the submitter.[1206]

[1202] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3848 (fig. 7) (Jan. 20, 2023). The share volumes in the Proposing Release are similar for beyond-the-midpoint (2.9%), at-the-midpoint (1.2%), below-the-midpoint (2.9%), at-the-quote (33.3%), near-the-quote (35.8%), and away-from-the-quote (23.8%) NMLOS. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that near-the-quote NMLOs represent around a third of total submission volume.

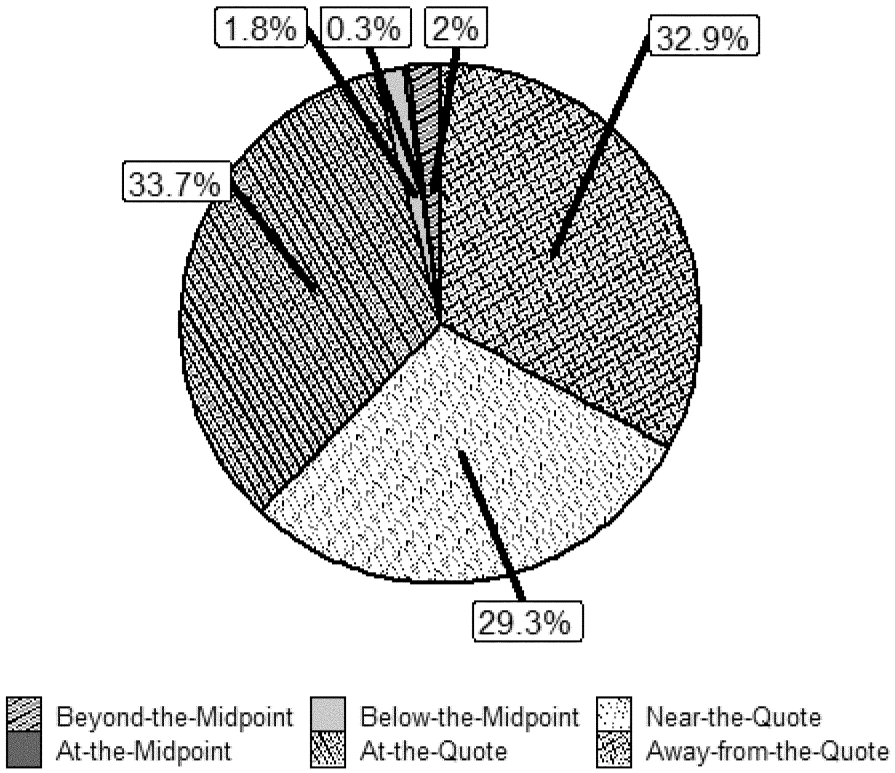
[1203] *See supra* note 1130 for a description of the dataset.

[1204] Results may be different following the implementation of the MDI Rules. *See supra* note 1201 and section VII.C.1.d)(2) for further discussion.

[1205] These numbers are the same as those in the Proposing Release. *See* Proposing Release, 88 FR 3786 at 3848 (Jan. 20, 2023).

[1206] *See infra* section IX.E.2.b) for a discussion of how NMLO orders that are cancelled quickly after submission may impact fill rates.

Figure 9: Order Submission Share Volume by NMLO Type, Mar. 2023



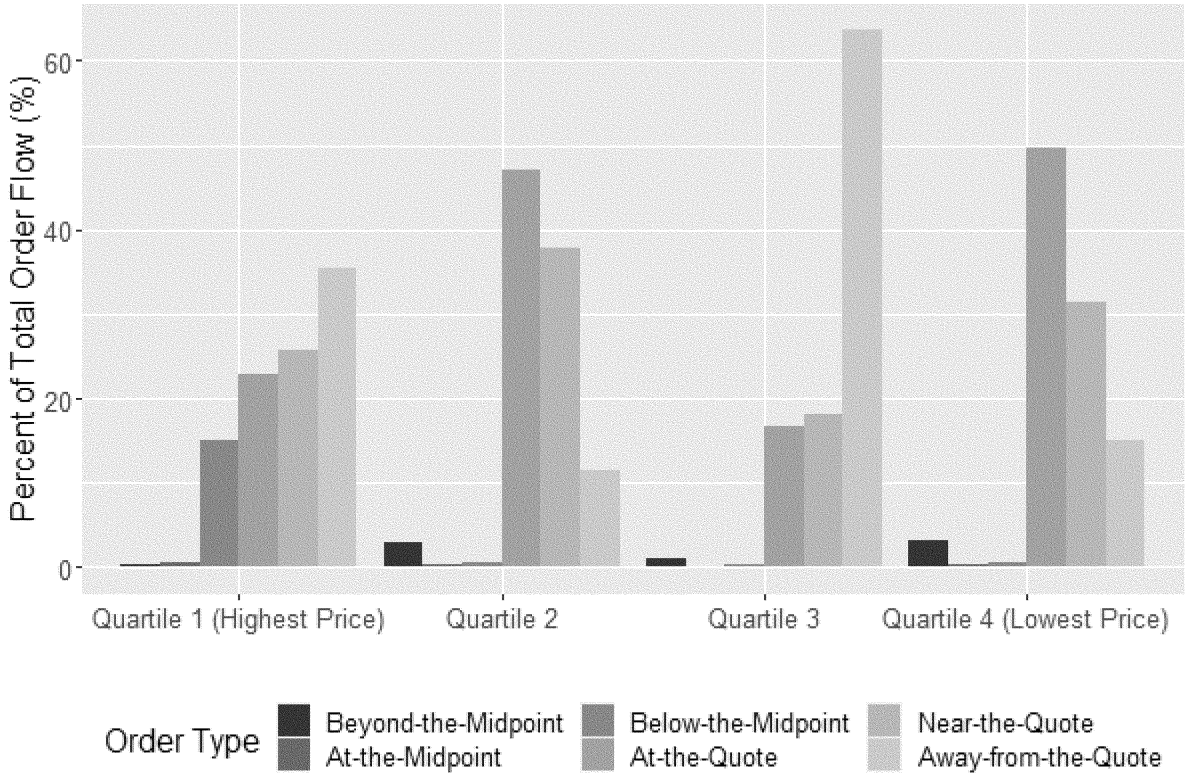
This figure plots the percentage of share volume that can be categorized into various NMLO categories, using order submission data from MIDAS. See supra note 1130 for a description of the dataset and supra note 1200 for definitions of the NMLO categories. Percentages are calculated as the number of submitted shares within a given NMLO category summed across all stocks and days in the sample, divided by the total number of submitted shares summed across all stocks and days. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1201 and section IX.C.1.c)(2).

Furthermore, the fact that the threshold for inclusion in preexisting Rule 605 reports was based on nominal terms (*i.e.,* 10 cents) means that NMLO coverage varied depending on the stock price: high-price stocks with smaller relative tick sizes would have had less NMLO coverage, since 10 cents represents a relatively tighter band around the NBBO when considered as a percentage of stock price.[1207] This is shown in Figure 10,[1208] which breaks down the NMLO submission volumes in Figure 9 by both order type and average share prices. The figure shows that away-from-the-quote NMLOs represent 35.5% of total NMLO share volume for the group of stocks with the highest share prices, but only 15.0% for the group of stocks with the lowest share prices. Given the positive fill rates for away-from-the-quote NMLOs from Figure 8, this implies that a higher portion of executed away-from-the-quote NMLOs have been excluded from preexisting Rule 605 reports for high-priced stocks. Excluding large portions of relevant NMLOs results in less reliable market quality measures; this may especially be the case for high-priced stocks, thus making comparisons between market centers less reliable for these stocks.

[1207] Results may be different following the implementation of the MDI Rules. Specifically, NMLO coverage for stocks priced above $250 may decrease even further, as the narrowing of the NBBO for these stocks will result in even tighter price bands. *See supra* section IX.C.1.c)(2) for further discussion.

[1208] The MIDAS data used in analysis has been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3850 (fig. 9) (Jan. 20, 2023). The Proposing Release similarly found that away-from-the-quote NMLOs represent a higher percentage (24.4%) of total NMLO share volumes for the group of stocks with the highest share prices as compared to the group of stocks with the lowest share prices (8.4%). Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that a higher portion of executed away-from-the-quote NMLOs in high-priced stocks were excluded from preexisting Rule 605 reports.

Figure 10: Order Submission Share Volume by NMLO Type and Stock Price Quartiles, Mar. 2023



This figure plots the percent of submitted shares that can be categorized into various NMLO categories, using order submission data from MIDAS. Stocks are split into quartiles based on average stock prices. Percentages are calculated as the number of submitted shares within a given order type category, summed across all stocks within a given market capitalization group and all days in the sample, divided by the total number of submitted shares summed across all stocks within a given market capitalization group and all days in the sample. See supra note 1130 for a description of the dataset and supra note 1200 for definitions of the NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1207 and section IX.C.1.c)(2).

Preexisting Rule 605 also required execution quality information for NMLOs to be measured relative to the time of order receipt. As will be shown in Figure 12 below, NMLOs that are submitted further away from the NBBO tend to take longer from the time of order receipt to execute than those submitted closer to the NBBO, as the NBBO has a further distance to move before it reaches the order's limit price. This requirement thus may have made it difficult to compare the execution times of market centers that handle NMLOs with varying distances from the NBBO.

(3) Midpoint-or-Better NMLOs

Prior to these amendments, Rule 605 reports required the separate reporting of execution quality information for inside-the-quote NMLOs. However, the Commission understands that some inside-the-quote limit orders may have different execution quality characteristics than other types of NMLOs, including other inside-the-quote NMLOs, and that this may vary across market centers. In particular, similarly to market and marketable limit orders, some at-the-midpoint and beyond-the-midpoint limit orders (collectively, ''midpoint-or-better'' orders) are submitted by traders with the intention of executing immediately, in this case against hidden or odd-lot inside-the-quote liquidity. However, because they are not a marketable order type (*i.e.,* they do not fully cross the spread), preexisting Rule 605 did not require certain statistics that are appropriate for marketable orders, such as effective spreads, to be reported for inside-the-quote NMLOs.[1209] Furthermore, some market centers, such as some wholesalers, treat ''beyond-the-midpoint'' limit orders (*i.e.,* NMLOs that are priced more aggressively than the midpoint) like marketable limit orders and will offer price improvement to these orders.

Confirming that there are differences between certain types of inside-the-quote NMLOs, Table 4 [1210] presents

[1209] For market and marketable limit orders, the effective spread captures how much more than the stock's estimated value a trader has to pay for the immediate execution of its order. *See infra* section IX.C.3.c)(6).

[1210] The CAT data used in this analysis have been updated since the Proposing Release for a more recent time period, as well as to include a larger sample of reporting entities (both wholesalers and exchanges/ATSs). Consistent with requiring time-to-execution buckets in Rule 605 reports rather than time-to-execution statistics (see supra section III.B.3), the methodology has also been updated to capture execution speeds as the percent of executed shares that are executed in under one millisecond, rather than mean and median execution times. *See* Proposing Release, 88 FR 3786 at 3850 (tbl. 5) (Jan. 20, 2023). The results in the Proposing Release

Continued

results from an analysis of the execution quality of different order types, including market, marketable limit, and various types of inside-the-quote NMLOs, along with at-the-quote NMLOs. The analysis uses a sample of orders from CAT data for the period of Q1 2023.[1211] First, the high percentage of beyond-the-midpoint and at-the-midpoint NMLO share volume that is submitted with IOC designations as compared to below-the-midpoint and at-the-quote NMLOs confirms that these orders are often submitted with the intention of executing immediately.[1212] Furthermore, the results show that there are differences between the execution characteristics of midpoint-or-better NMLOs as compared to NMLOs that are below the midpoint or at the quote. For example, for wholesalers, there is a notable difference in the fill rates of midpoint-or-better NMLOs (9.8% to 10%%) as compared to NMLOs below the midpoint (3.7% to 4.4%). Similarly, while around 70–77% of on-exchange midpoint-or-better NMLOs execute in less than a millisecond, this number drops to around 28.6% for below-the-midpoint NMLOs, and 9.3% for at-the-quote NMLOs.[1213] This analysis suggests that midpoint or better orders have a sufficiently different execution profile from other NMLOs to warrant different reporting requirements.

Table 4: Execution Quality Characteristics Across Different Order Types, Q1 2023

Exchanges & ATSs	IOC Volume (% Of Share Volume)	Fill Rate (%)	Executions Under 1 Millisecond (%)
Market	22.3%	84.2%	48.9%
Marketable Limit	92.6%	14.1%	97.1%
Beyond-the-Midpoint	35.8%	0.3%	76.9%
At-the-Midpoint	37.9%	2.2%	70.4%
Below-the-Midpoint	4.7%	0.1%	28.6%
At-the-Quote	13.3%	0.9%	9.3%
Wholesalers	**IOC Volume (% Of Share Volume)**	**Fill Rate (%)**	**Executions Under 1 Millisecond (%)**
Market	0.2%	94.8%	11.1%
Marketable Limit	62.9%	39.1%	20.2%
Beyond-the-Midpoint	90.8%	10.0%	18.9%
At-the-Midpoint	84.2%	9.8%	12.6%
Below-the-Midpoint	65.3%	3.7%	5.8%
At-the-Quote	67.0%	4.4%	11.7%

This table shows execution quality metrics for different order types using CAT data during the period of Q1 2023, along with the percentage of shares that are submitted with IOC designations (calculated as the number of shares submitted with an IOC designation summed across all stocks and days in the sample, as a percentage of the total number of submitted shares summed across all stocks and days). Also presented are fill rates (calculated as the number of shares executed, summed across all stocks and days in the sample, divided by the number of shares submitted, summed across all stocks and days in the sample.), and percentage of executed orders that execute in less than one millisecond (calculated as the number of shares executed in less than one millisecond summed across all stocks and days, as a percentage of the total number of executed orders summed across all stocks and days). Results are presented separately for Wholesalers and for Exchanges and ATSs. Large block orders (i.e., orders greater than $200,000) are excluded from this analysis. See supra note 1211 for dataset description and supra note 1200 for definitions of the NMLO categories. As discussed in supra note 1182, this analysis excludes some orders, including orders with certain handling codes and ATS-specific order types that were determined to not be eligible for Rule 605 reporting. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1212 and section IX.C.1.c)(2).

similarly show that beyond-the-midpoint NMLOs executed by wholesalers tend to have faster time-executions and higher fill rates than other types of inside-the-quote NMLOs. Therefore, these updates did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that beyond-the-midpoint orders have different execution characteristics than other types of inside-the-quote NMLOs. S*ee infra* note 1213 for further discussion comparing the results from the Proposing Release to those in Table 4.

[1211] This analysis uses CAT data for a sample of 400 stocks. *See supra* note 1182 for a description of the dataset. In order to focus on NMLOs that will be included in Rule 605 reports as amended, the analysis includes only NMLOs that are immediately executable upon entry, *i.e.,* NMLOs that are submitted at or better than the quote.

[1212] This dataset is from prior to the implementation of the MDI Rules and the distribution of orders into various NMLO categories, including at-and-beyond-the-midpoint orders, may change following the implementation of the MDI Rules. *See supra* note 1207 and section IX.C.1.c)(2). However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average fill rates and time-to-execution of these NMLO categories.

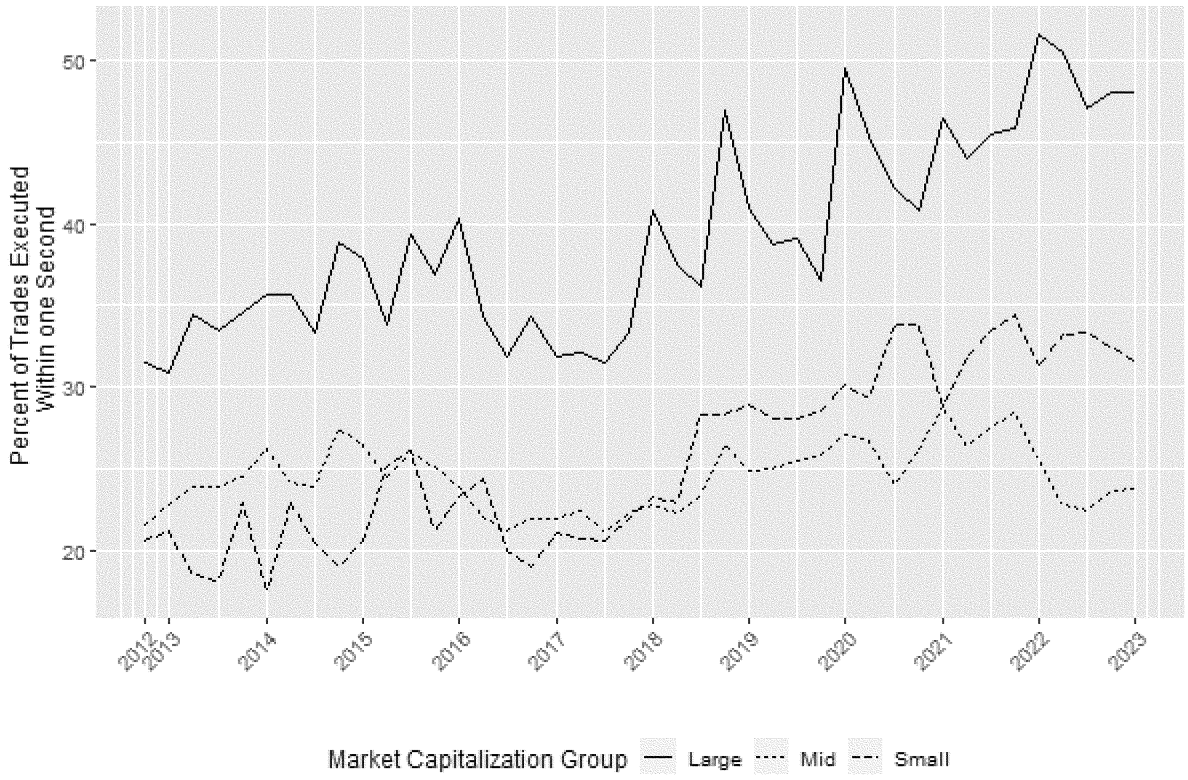
[1213] The analysis in the Proposing Release additionally looked at the percentage of price-improved orders across different order types executed by wholesalers and found that beyond-the-midpoint orders are offered price improvement by wholesalers more often than other inside-the-quote NMLOs. *See* Table 5 in the Proposing Release, 88 FR 3786 at 3850 (Jan. 20, 2023). However, as stated by a commenter, at least some of a NMLO's price improvement will be driven by its limit price, which is outside the control of the market center. *See* Schwab Letter at 32. The Commission agrees with the commenter and therefore focuses this analysis on time-to-execution and fill rates.

(4) Time-to-Execution

Prior to these amendments, Rule 605 required the reporting of time-to-execution information in two ways. First, for market and marketable limit orders, reporting entities were required to report the share-weighted average time-to-execution for orders executed with price improvement, at the quote, and with price dis-improvement, calculated based on timestamps recorded in seconds. Second, for all orders, reporting entities were required to report the number of shares executed within certain predefined time-to-execution categories or buckets.[1214]

First, calculating average time-to-execution statistics using timestamps recorded in terms of seconds does not reflect changes in market speeds. Figure 11 [1215] uses data from the SEC's MIDAS analytics tool [1216] to plot the percentage of on-exchange NMLOs that, conditional on being executed,[1217] are fully executed within one second or less from the time of submission between Q4 2012 and Q1 2023. The figure shows that this percentage has increased over time across different market capitalization groups, and that in Q1 2023 nearly half (48.0%) of executed NMLOs are executed in less than one second in large market cap stocks. Therefore, while timestamps expressed in seconds may have been appropriate for the markets when Rule 605 was first adopted, they are likely to miss variation in time-to-execution across market centers in today's markets.[1218]

Figure 11: Percentage of NMLOs Executed Within One Second, Q4 2012 to Q1 2023



This figure plots the percentage of NMLOs that, conditional on being executed on a national securities exchange, are executed within one second or less from the time of submission between Q4 2012 and Q1 2023 using data from the SEC's MIDAS analytics tool. See supra note 1216 for dataset description.

[1214] *See* prior 17 CFR 242.605(a)(1)(i)(F) through (J) (detailing time-to-execution buckets of 0 to 9 seconds, 10 to 29 seconds, 30 to 59 seconds, 60 to 299 seconds, and 5 to 30 minutes after the time of order receipt).

[1215] The data used in this analysis have been updated since the Proposing Release to include a more recent time period. *See* Proposing Release, 88 FR 3786 at 3851 (fig. 10) (Jan. 20, 2023), which presents the same analysis for Q4 2012 through Q1 2022. The percentage of NMLOs executed within one second has decreased slightly since Q1 2022. However, these differences due to updates to the dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that the percentage of NMLOs executed within one second has generally increased over time.

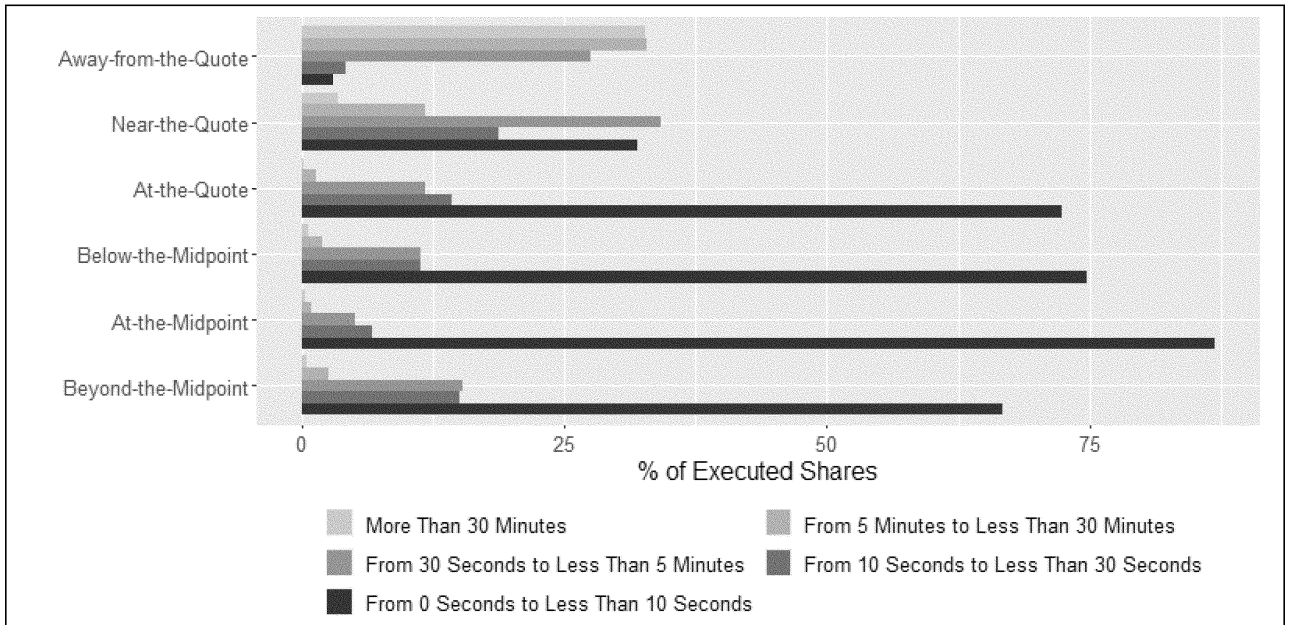
[1216] *See Conditional Cancel and Trade Distributions* (Dec. 2023), SEC, *available at https://www.sec.gov/marketstructure/downloads.html*). If the order is not fully executed, it is treated as canceled at the close. *See Quote Life Report Methodology,* SEC, *available at https://www.sec.gov/marketstructure/quote-life-report-methodology* (last visited Jan. 30, 2024, 3 p.m.).

[1217] *I.e.,* Figure 8 plots the number of fully executed NMLOs executed within one second relative to the total number of fully executed on-exchange NMLOs. In contrast, Figure 6 plots the number of executed NMLO shares divided by the total number of submitted NMLO shares.

[1218] *See, e.g.,* Better Markets Letter at 3, stating that ''there have been significant developments in trading since Rule 605 was adopted. It is now done electronically with automated systems and the speeds have increased exponentially, measured in milli or microseconds, not mere seconds;'' and FIF Letter at 17, stating that ''market centers, in particular, typically record trading events with greater precision than milliseconds.''

Second, given that many orders are executed on a sub-second basis, the time-to-execution buckets prescribed by preexisting Rule 605 are not able to fully capture variations in execution times across order types.[1219] To illustrate this, Figure 12 [1220] groups on-exchange NMLO executions collected from MIDAS for the period of Mar. 2023 [1221] into time-to-execution buckets that correspond to those defined in preexisting Rule 605. The figure shows that, while away-from-the-quote and near-the-quote NMLOs are relatively evenly distributed across the time-to-execution categories, these categories do not capture much differentiation for other NMLO types, particularly for those that take place inside the quote. For inside-the-quote NMLOs, 66.6% to 86.9% of orders are grouped in the shortest time-to-execution bucket (from 0 to less than 10 seconds), depending on the distance to the midpoint, while the category corresponding to the longest time-to-execution bucket defined by preexisting Rule 605 (5 to 30 minutes) has 0.4% to 0.6% of inside-the-quote NMLO executions. Therefore, these time-to-execution categories likely did not fully capture variations in the execution times of these orders across reporting entities.

Figure 12: Distribution of NMLO Execution Times, Mar. 2023



This figure plots the distribution of executed shares across different time-to-execution categories, for different categories of NMLOs, using data from MIDAS. Percentages are calculated as the number of shares in a given order type category that executed within a given time category, summed across all stocks and days in the sample, divided by the total number of executed shares within a given order type category, summed across all stocks and days in the sample. Execution times are calculated as the time of order receipt (which, for at- and inside-the-quote NMLOs, is equivalent to the time of executability) to the first time that one or more of the order's shares are executed. See supra note 1130 for dataset description and supra note 1200 for definitions of the NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1221 and section IX.C.1.c)(2).

MIDAS data include only orders and quotes that are posted on national securities exchanges' limit order books and trades that are executed against those orders,[1222] and as such it is not possible to view the submission times (and thus calculate the time-to-execution of) market and marketable limit orders using MIDAS data. As a result, the above analysis is only able to consider the time-to-execution of on-exchange NMLOs. In order to estimate the time-to-execution of both on- and off-exchange orders, including market and marketable limit orders, the

[1219] *See supra* note 1214 for a definition of these time-to-execution categories.

[1220] The MIDAS data used in this analysis has been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3852 (fig. 11) (Jan. 20, 2023). The distributions of orders across time-to-execution buckets for different NMLO categories are similar in the Proposing Release: for inside-the-quote NMLOs, 84.2% to 85.7% of orders were grouped in the shortest time-to-execution bucket (from 0 to less than 10 seconds), depending on the distance to the midpoint, while the category corresponding to the longest time-to-execution bucket (5 to 30 minutes) has only 1.1% to 1.3% of executions. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that the time-to-execution categories in preexisting Rule 605 likely did not fully capture variations in the execution times of orders across reporting entities.

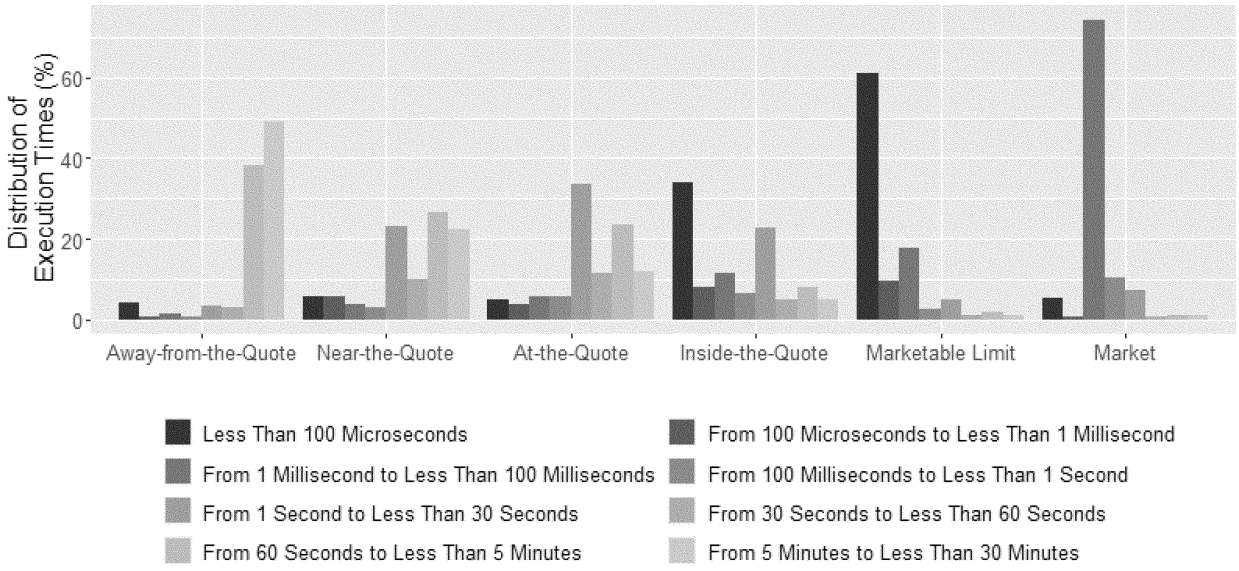
[1221] *See supra* note 1130 for data description. This dataset includes only NMLOs submitted to exchanges that do not immediately execute and are subsequently posted to the limit order book. The results of this analysis may not reflect the execution quality of inside-the-quote NMLOs that execute immediately, *e.g.,* against hidden liquidity on the limit order book. Time-to-execution is calculated as the time for order receipt to the first time that one or more of the order's shares are executed. Furthermore, this dataset is from prior to the implementation of the MDI Rules and the distribution of orders into various NMLO categories may change following the implementation of the MDI Rules. *See supra* note 1207 and section IX.C.1.c)(2). However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average time-to-execution of these NMLO categories.

[1222] *See supra* note 1130. MIDAS data include information about off-exchange trade executions, but not information about any off-exchange order submissions, so it is also not possible to use MIDAS data to calculate the time-to-execution of off-exchange orders.

Commission used the Tick Size Pilot B.I Market Quality data from April 2016 until March 2019.[1223] Figure 13 [1224] shows the distribution of time-to-execution statistics for market and marketable limit orders, along with the three categories of non-marketable limit orders required in Rule 605 reports prior to these amendments (*i.e.,* inside-the-quote, at-the-quote, and near-the-quote). Note that the time-to-execution categories defined in the Tick Size Pilot dataset are more granular than those in preexisting Rule 605.

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Figure 13: Distribution of Order Execution Times, Apr. 2016 to Mar. 2019



This figure plots the distribution of execution times across different time-to-execution categories, for market orders, marketable limit orders, and different categories of NMLOs. Percentages are calculated as the number of shares in a given order type category that executed within a given time category, summed across all stocks and days in the sample, divided by the total number of executed shares within a given order type category, summed across all stocks and days in the sample. See supra note 1124 for dataset description and supra note 1197 for definitions of the NMLO categories. See supra note 1115 for dataset description and supra note 1200 for definitions of the NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1223 and section IX.C.1.c)(2).

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Echoing the results using MIDAS data in Figure 12, Figure 13 shows that, for at-the-quote and near-the-quote limit orders, executions are reasonably well distributed across the different time-to-execution buckets and there is positive volume in the longer time-to-execution buckets that are included in both preexisting Rule 605 and the Tick Size Pilot categorizations (30 to 59 seconds, 60 to 299 seconds, and 5 to 30 minutes). However, similar to the results for inside-the-quote NMLOs, for market and marketable limit orders, execution times are mostly bunched up at the faster end of their time buckets; in fact, the vast majority of these orders are executed in under one second, falling within the shortest preexisting Rule 605 category of shares executed from 0 to 9 seconds. Likewise, the longer time-to-execution buckets that are included in both preexisting Rule 605 and the Tick Size Pilot categorizations are virtually empty. Therefore, as with inside-the-quote NMLOs, preexisting Rule 605 time-to-execution categories were missing information about potential differences across reporting entities in terms of the execution times of the market and marketable limit orders that they handle, which has limited the usefulness of time-to-execution information for investors.[1225]

[1223] *See supra* note 1115 for data description. As the Tick Size Pilot only collected data for small cap stocks, these execution times are not necessarily representative of all stocks. For example, larger market cap stocks are typically more liquid and likely execute faster. Also, as this is an older dataset (Apr. 2016 until Mar. 2019), it may be that market speeds have changed since this time. However, as it is likely that market speeds have only gotten faster since this time period, it could represent a lower bound on execution times and therefore still give an idea of how relevant the preexisting Rule 605 time-to-execution buckets are for market and marketable limit orders. Lastly, this dataset also includes off-exchange orders, while the MIDAS data include only on-exchange orders, which could result in different execution times between the two datasets. Furthermore, this dataset is from prior to the implementation of the MDI Rules and the distribution of orders into various NMLO categories may change following the implementation of the MDI Rules. *See supra* note 1207 and section IX.C.1.c)(2). However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average time-to-execution of these NMLO categories.

[1224] The same figure can be found in the proposing release. *See* Proposing Release, 88 FR 3786 at 3853 (Figure 12) (Jan. 20, 2023).

[1225] Academic literature suggests that time-to-execution information would be especially useful for institutional investors with short-lived private information, who profit from trading against other, slower institutions. *See, e.g.,* Ohad Kadan et al., *Trading in the Presence of Short-Lived Private Information: Evidence from Analyst Recommendation Changes,* 53 J. Fin. Quantitative Analysis 1509 (2018). Time-to-execution information would also benefit institutions that engage in market making, as one study shows these institutions are likely to rely on speed to reduce their exposure to adverse selection and to relax their inventory constraints. *See* Jonathan Brogaard et al., *Trading Fast and Slow: Colocation and Liquidity,* 28 Rev. Fin. Stud. 3407 (2015).

(5) Realized Spreads

Because of the increase in the speed at which markets operate,[1226] as well as the diversity of size and liquidity characteristics across stocks, the requirement in preexisting Rule 605 to use a single five-minute benchmark to calculate realized spreads [1227] may have limited the ability of market participants to use this measure to control for adverse selection risk when evaluating execution quality metrics, such as realized spreads.

Realized spreads are calculated by comparing an order's transaction price to the NBBO midpoint (*i.e.,* an estimate of the average expected trade price) at some later time interval. Realized spreads can be decomposed into the difference between the effective spread, which captures how much a trader has to pay for (and thus how much a liquidity provider earns from) the immediate execution of an order, and the movement in market prices some time interval after a trade (*i.e.,* price impact).[1228] Liquidity providers face adverse selection risk when they accumulate inventory, for example, by providing liquidity to more informed traders, because of the risk of market prices moving away from market makers before they can unwind their positions.[1229] Thus, price impact can be thought of as a measure of adverse selection. Liquidity providers will generally set effective spreads to compensate for this adverse selection risk. Realized spreads, as the residual between the effective spread and price impact, can thus be thought of as the portion of the spread that liquidity providers earn in excess of adverse selection.[1230] Because of their inverse relationship with price impact, smaller (or even negative) realized spreads reflect that liquidity providers are earning less of the spread from their liquidity provision, which is usually a reflection of order flow with greater adverse selection risk. Therefore, all else being equal, if a market center reports favorable execution quality measures but a low or negative realized spread, this would reflect that the market center is still providing liquidity even during less favorable conditions.

Several commenters stated that realized spread is an imperfect proxy for revenue from liquidity provision.[1231] The Commission does not claim that the realized spread is a measure of a firm's overall profitability.[1232] The Commission stated in the Proposing Release and reiterates here that, to the extent realized spreads capture adverse selection costs faced by liquidity providers, they provide a measure of the potential profitability of trading for liquidity providers.[1233] In addition, the usefulness of realized spreads as a control variable for adverse selection does not depend on their being a measure of profitability.[1234]

Realized spreads vary significantly with the chosen time horizon. An academic study shows that realized spreads will generally decrease as the time horizon over which they are calculated is lengthened, highlighting that realized spreads are highly dependent on the time horizon over which they are calculated.[1235] The same study also finds that different time horizons may be appropriate for different stocks, depending on the stock's market capitalization.[1236] One way to interpret the decline in realized spreads as the time horizon increases is to consider that information is incorporated into market prices incrementally; a longer time horizon thus means that more of the price impact has been realized. The profitability of a market making strategy increases with the speed at which market makers are able to turn over their inventory before adverse movements in prices.

In order to examine how realized spreads vary with the chosen time horizon, the Commission analyzed realized spreads calculated over time horizons ranging from 10 milliseconds to five minutes,[1237] as well as how they differ based on market capitalization size, using TAQ data from Q1 2023 for a sample of 400 stocks from four different market capitalization groups (less than $100 million, $100 million to $1 billion, $1 billion to $10 billion, and

[1226] *See supra* section IX.C.3.c)(4) for a discussion of evidence of increased market trading speeds.

[1227] *See* prior 17 CFR 242.600(b)(9). Prior to these amendments, for buy orders, realized spread was double the amount of difference between the execution price and the midpoint of the NBBO five minutes after the time of order execution. For sell orders, realized spread was double the amount of difference between the midpoint of the NBBO five minutes after the time of order execution and the execution price.

[1228] Denoting by p_t the price of a trade, d_t the direction of the trade, m_t the midpoint at the time of trade, and m_{t+1} at the midpoint at time t+1 following a trade, the realized spread can be calculated as (effective spread − price impact) = $2*d_t*(p_t - m_t) - 2*\ d_t\ *(m_{t+1} - m_t) = 2*\ d_t\ *(p_t - m_{t+1})$. In preexisting Rule 605, realized spreads were required to be measured using the price at the time of order execution, and effective spreads were required to be measured using the midpoint price at the time of order receipt. To the extent that there were significant differences in the time of order receipt and the time of order execution, the decomposition of realized spreads in preexisting Rule 605 reports into effective spreads and price impact was not exact. The decomposition of realized spreads into effective spreads and price impact will continue to not be exact in the amended rule; *see infra* note 1484 for further discussion.

[1229] For example, if a liquidity provider provides liquidity to an informed trader, who is selling its shares because it knows that the share price is about to drop, the market maker will accumulate a long position in the stock. If the market maker were to immediately try to unwind this position in the market, the share price may have already dropped as a result of the realization of the informed trader's information, and the market maker will have to sell at a lower price than what it paid for the shares.

[1230] *See, e.g.,* Conrad and Wahal, *supra* note 544, at 240, stating that the realized spread ''can be thought of as the residual profit to liquidity providers.'' Realized spreads do not measure the actual trading profits that liquidity providers earn from supplying liquidity. In order to estimate the trading profits that liquidity providers earn, we would need to know at what times and prices the liquidity provider executed the offsetting position for a trade in which it supplied liquidity (*e.g.,* the price at which the liquidity provider later sold shares that it bought when it was supplying liquidity). If liquidity providers offset their positions at a price and time that is different from the NBBO midpoint at the time lag used to compute the realized spread measure, then the realized spread measure is an imprecise proxy for the profits liquidity providers earn supplying liquidity. Differences in inventory holding periods of different liquidity providers could also create differences in the trading profits that liquidity providers earn that would not be captured in the realized spread measure if it is estimated over the same time horizon for all liquidity providers. *See* Lingyan Yang & Ariel Lohr, *The Profitability of Liquidity Provision* (working paper Feb. 18, 2022), *available at https://ssrn.com/abstract=4033802* (retrieved from SSRN Elsevier database). Additionally, realized spread metrics do not take into account any transaction rebates or fees, including PFOF, that a liquidity provider might earn or pay, which would also affect the profits they earn when supplying liquidity.

[1231] *See, e.g.,* Rule 605 Citadel Letter at 8–9, stating that ''the Commission's assertion that realized spread can serve as a proxy for liquidity provider profitability has been thoroughly discredited, including by academic research'' and Virtu Letter II at 12, stating that ''there is a risk that such measurements are improperly used . . . as a proxy for liquidity providers' profitability.'' *See also* Conrad and Wahal, *supra* note 544, at 247.

[1232] For example, realized spreads do not account for other costs that liquidity providers may incur, such as fixed costs for setting up their trading infrastructure and costs for connecting to trading venues and receiving market data. *See supra* section III.B.4.a)(2) for further discussion. *See also supra* note 1230.

[1233] *See* Proposing Release, 88 FR 3786 at 3814 (Jan. 20, 2023).

[1234] *See, e.g., infra* note 1506, discussing commenter support for the usefulness of realized spreads as a measure of order flow characteristics.

[1235] *See* Conrad and Wahal, *supra* note 544.

[1236] *See id.* Specifically, the authors recommend a horizon of no more than 15 seconds for large stocks and 60 seconds for small stocks.

[1237] While the analysis of realized spreads in the Proposing Release considered only six time horizons (1 second, 5 seconds, 10 seconds, 15 seconds, 1 minute, and 5 minutes), this analysis considers an additional four time horizons (10 milliseconds, 50 milliseconds, 100 milliseconds, and 500 milliseconds) in response to a commenter who recommended that realized spreads be calculated using shorter time frames (specifically, 50 milliseconds and 100 milliseconds). *See* Healthy Markets Letter at 17; *see also* Figure 13 in the Proposing Release, 88 FR 3786 at 3854 (Jan. 20, 2023).

over $10 billion).[1238] Following the academic literature, results are presented separately for different market capitalization groups as a proxy for different liquidity variables, with high market capitalization correlating highly with higher liquidity.[1239] The results are presented in Figure 14 [1240] and show that realized spreads tend to decrease as the time horizon increases. One exception is the five-minute time horizon for the largest market capitalization group, for which realized spread begins to increase. This may be driven by the addition of noise at this longer time horizon for large-cap stocks.[1241]

Figure 14 also shows that, except for the largest market capitalization group, realized spreads tend to decline as market capitalization size increases.[1242] Echoing results from the academic literature, the persistence of these systematic differences in realized spreads across market capitalization sizes implies that a time horizon that may be ideal for large cap stocks may not be appropriate for small cap stocks.[1243]

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[1238] This analysis uses data from intraday TAQ Consolidated Trade files for the period of Q1 2023 for a sample of 400 stocks. *See supra* note 1129 for a description of how the sample of stocks was selected.

[1239] *See, e.g.,* Conrad and Wahal, *supra* note 544, at 242: ''We display many of our results separately for small- and large-capitalization stocks because size is so strongly correlated with liquidity variables.''

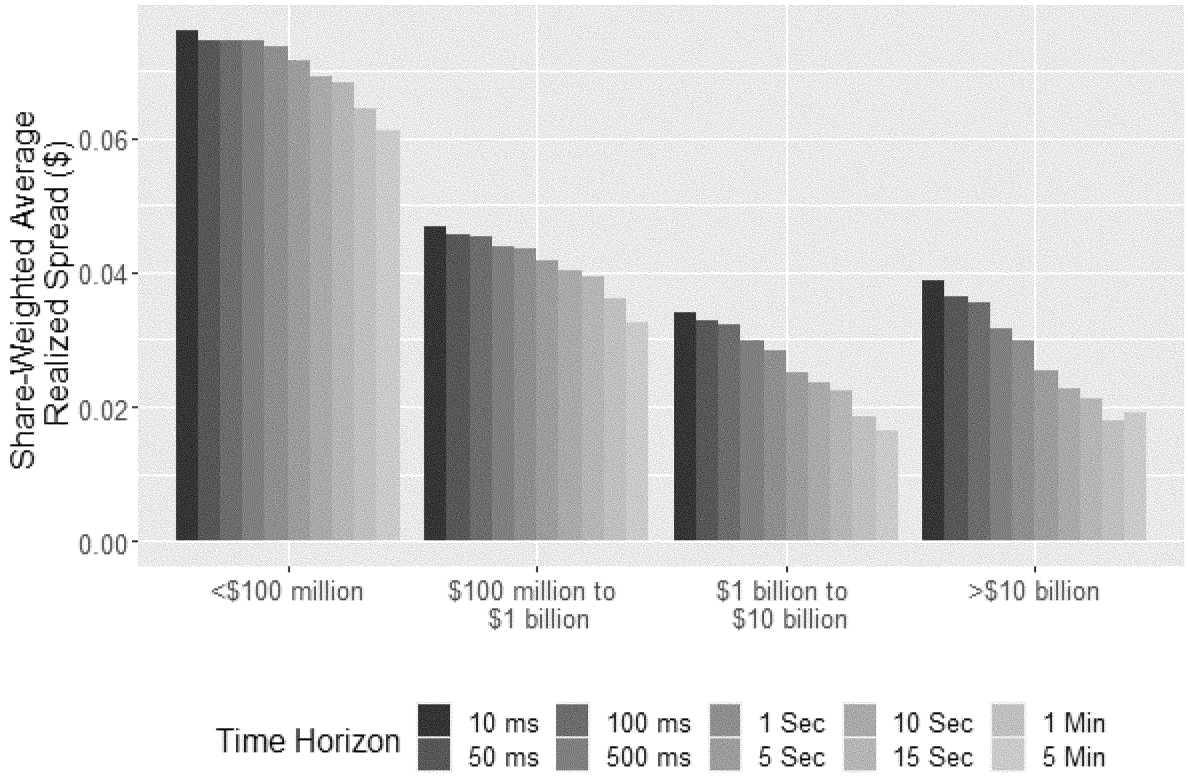
[1240] The TAQ data used in this analysis have been updated since the Proposing Release to account for a more recent time period. In addition, the methodology has been updated to include additional time horizons. *See* Proposing Release, 88 FR 3786 at 3815 (fig. 1) (Jan. 20, 2023), which presents a similar analysis that uses data from Feb. 2021 (*see* Proposing Release, 88 FR 3786 at 3854, n.706 (Jan. 20, 2023), for data description), and includes six time horizons (1 second, 5 seconds, 10 seconds, 15 seconds, 1 minute, and 5 minutes); *see supra* note 1237. As the sample was from a different time period, the magnitudes of realized spreads are slightly different from those in the sample from Q1 2023. However, the updates to the dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that realized spreads tend to decrease, for each market capitalization group, as the time horizon increases.

[1241] Conrad and Wahal also find a slight increase in realized spreads at longer time intervals. *See* Conrad and Wahal, *supra* note 544, figs. 1, 2.

[1242] Using data from Feb. 2021, an analysis in the Proposing Release further found that this pattern of declining realized spreads across increasing time horizon also held across different market centers. *See* Proposing Release, 88 FR 3786 at 3854 (fig. 13) (Jan. 20, 2023). An analysis using the updated sample of data described in note 1238 *supra* confirms that this pattern across market centers holds in Q1 2023 as well.

[1243] *See, e.g.,* results from Conrad and Wahal, discussed in note 1236. The Commission's analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. Specifically, the NBBO midpoint in stocks priced higher than $250 may be different under the MDI Rules than it was during out sample period, resulting in changes in the estimates for statistics calculated using the NBBO midpoint, such as realized spreads. While specific numbers might change, the Commission does not expect the relative variation in realized spreads across different time horizons to change as a result of the implementation of MDI. *See supra* section IX.C.1.c)(2) for further discussion.

Figure 14: **Average Realized Spreads by Market Capitalization and Time Horizon, Q1 2023**



This figure plots the share-weighted average realized spread using different time horizons, across four different market capitalization groups (less than $100 million, $100 million to $1 billion, $1 billion to $10 billion, and over $10 billion), using data from TAQ. See supra note 1238 for dataset description. Measures are winsorized at the 5% and 95% level. Measures grouped by size quartile were calculated on a stock-day basis, then averaged by stock, then averaged within each size quartile. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1243 and section IX.C.1.c)(2).

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(6) Effective Spreads

Prior to these amendments, reporting entities were not required to include information about the effective spreads of NMLOs in Rule 605 reports, including the effective spreads of midpoint-or-better NMLOs. The effective spread is calculated by comparing the trade execution price to the midpoint of the prevailing NBBO at the time of order receipt, which is used as an estimate of the stock's value.[1244] For market and marketable limit orders, the effective spread captures how much more than the stock's estimated value a trader has to pay for the immediate execution of its order. Like market and marketable limit orders, some at-the-midpoint and beyond-the-midpoint limit orders are submitted by traders with the intention of executing immediately, in this case against hidden or odd-lot inside-the-quote liquidity.[1245] Therefore, for midpoint-or-better orders, effective spreads contain information that may also otherwise be useful to investors.

(7) Notional Spreads (Effective and Realized)

The fact that reports under preexisting Rule 605 contained information on average realized and average effective spreads only in terms of dollar amounts, and not in terms of percentages, made it difficult for market participants to account for differences in share prices when comparing across market centers.[1246] While spreads in notional terms can be useful for participants because they can reflect a cost of (or benefit to) trading in terms that are easy to interpret, it is also the case that, since the effective spread is a per-share cost, the real costs to investors captured by the effective spread can be very different, depending on the stock price.[1247] All else being equal, spread measures tend to be higher in dollar terms for higher-priced stocks. As different reporting entities handle and/or transact in different mixes of stocks, this may have made it difficult for market participants who may want to compare reporting entities' overall price performance or their performance for baskets of stocks to aggregate across effective spreads.[1248]

Also, measuring spreads in absolute terms may lead to comparisons across reporting entities that do not account for potential differences in the timing of order flow, particularly for stocks whose prices vary significantly over the course of the monthly reporting period. For example, say that a stock's price increased dramatically over the course of a month from $2.50 to $250 and that, by chance, Market Center A executed more order flow for that stock at the beginning of the month, while Market Center B executed more order flow for that stock at the end of the month. In its Rule 605 report for that month, Market Center A showed an average effective spread of $0.01, while Market Center B showed an average effective spread of $0.10. Measured in dollar terms, Market Center B would seem to have offered worse execution prices than Market Center A, since it is associated with higher effective spreads. However, relative to the stock price, Market Center B would actually have offered the better prices (a percentage effective spread of 0.04%) compared to Market Center A (a percentage effective spread of 0.4%).[1249] This illustrates that a market center's spread measures may be higher in dollar terms, but not necessarily because it offered worse execution performance; instead, these differences in spread measures may simply reflect changes in the stock's dollar price and the timing of market center's order flow.

(8) Price and Size Improvement

The measure of price improvement required by preexisting Rule 605 may not have always succeeded in capturing price improvement relative to the best available prices. Prior to these amendments, market centers were required to report price improvement only as the difference between the trade price and the NBBO. However, in cases where odd-lot volume is available at prices better than the NBBO, price improvement measured relative to the NBBO will not reflect the best available displayed prices.[1250] This may have limited market participants' ability to compare these measures of price improvement across market centers. For example, if a market center internalizes an order with $0.05 of price improvement relative to the NBBO, but meaningful odd-lot liquidity is available on another market center at prices that are $0.10 better than the NBBO, the market center would have posted a price improvement measure of $0.05, even though the investor could have received a better price if the market center had routed the order to execute against the available odd-lot liquidity available elsewhere instead of internalizing the order. As a result, in some cases, measures of price improvement in preexisting Rule 605 may not have accurately reflected the amount of price improvement offered by some market centers.[1251]

Information about price improvement is different from information about whether orders received an execution of more than the displayed size at the quote, *i.e.,* ''size improvement.'' The price improvement metrics required by preexisting Rule 605 do not necessarily

[1244] *See, e.g.,* Bjorn Hagströmer, *Bias in the Effective Bid-Ask Spread,* 142 J. Fin. Econ. 314 (2021); *see infra* section IX.E.3.c)(3) discussing potential issues with using the midpoint to calculate effective spreads.

[1245] *See supra* section IX.C.3.c)(5) for further discussion.

[1246] In theory, market participants could also control for differences in share prices by matching up stock-level information from Rule 605 reports to, *e.g.,* information on the stock's average stock price from that month. However, this would require market participants who wish to control for differently priced stocks to go through the extra step of gathering and matching stock price information to Rule 605 data, which may be an unreasonable expectation, particularly for individual investors with limited resources. Furthermore, while a monthly average might well capture the prevailing stock price for any given execution for a stock with low price volatility, it might not be a good representation of the prevailing stock price for executions in stocks with high price volatility.

[1247] To illustrate, consider an investor that wants to acquire a $10,000 position in a $250 stock with an effective spread of $0.01; the investor will have to pay about $0.40 to purchase 40 shares of the stock. Now consider an investor who wants to acquire a $10,000 position in a $2.50 stock with an effective spread of $0.01; the investor would have to pay around $4.00 to acquire 400 shares. In other words, even though the dollar effective spread was the same, it was 10 times more expensive for the investor to accumulate a position worth the same dollar amount in the lower-priced stock.

[1248] While the main purpose of Rule 605 is to facilitate comparisons across reporting entities on the basis of execution quality within a particular security, the Commission understands that access to aggregated information is useful for market participants. The amendment that requires reporting entities to prepare summary reports that aggregate execution quality information for S&P 500 stocks, along with all NMS stocks, will give market participants access to aggregate effective spreads for one commonly used basket of stocks. Meanwhile, per-stock percentage spread information will enhance market participants' ability to aggregate effective spread information across baskets of stocks other than the S&P 500.

[1249] To illustrate how the percentage effective spread can reflect different costs in real terms, consider if one customer acquired a $10,000 stake in the stock at the beginning of the month (*i.e.,* $10,000/$2.50 = 4,000 shares); a per-share effective spread of $0.01 means that the customer's cost of acquiring the position would have been $40. Meanwhile, another customer acquired a $10,000 stake at the end of the month (*i.e.,* $10,000/$250 = 40 shares); a per-share effective spread of $0.10 means that the customer's cost would have been only $4.

[1250] *See, e.g.,* Bartlett et al. (2022), *supra* note 33, who found that odd-lots offer better prices than the NBBO 18% of the time for bids and 16% of the time for offers. The authors found that this percentage increases monotonically in the stock price, for example, for bid prices, increasing from 5% for the group of lowest-price stocks in their sample, to 42% for the group of highest-priced stocks.

[1251] One commenter stated that measures of price improvement in preexisting Rule 605 were incomplete because they did not include liquidity from odd-lot quotes at prices better than the NBBO. *See* Virtu Letter II at 7.

capture a market center's ability to fill orders beyond the liquidity available at the NBBO.[1252] For example, consider a situation in which the market is $10.05 × $10.10 with 100 consolidated shares available at the NBO of $10.10 and 100 consolidated shares available at the next best ask price of $10.15. Say that a trader submits a marketable buy order for 200 shares to a market center, which fills the entire order at the best ask price of $10.10. The market center's Rule 605 statistics would reveal a price improvement metric of $0 for this order, despite the fact that the trader saved money by avoiding having to walk the book, which would have resulted in a total price of (100 * $10.10) + (100 * $10.15) = $2,025. As a result of the market center's ability to offer this ''size improvement,'' the trader saved an average of $10.125 − $10.10 = $0.025 per share. This information about execution quality would not be reflected in the market center's price improvement statistics. The handling of orders that exceed available NBBO depth may not be a rare occurrence: One academic study found that, in a proprietary database consisting of orders handled by wholesalers, over 52% of the total shares executed in their data were from orders seeking to trade more shares than are available at the NBBO and that, of these trades, 83.61% received size improvement from wholesalers.[1253]

As the Commission stated in the Rule 11Ac1–5 Adopting Release, the average effective spread captures some information about size improvement.[1254] The effective spread is calculated by comparing the trade execution price with the midpoint of the NBBO, rather than with the NBBO itself. In this way, it captures the full range of available liquidity at a market center and not merely the displayed orders that determine the NBBO. The effective spread will be larger for orders that are larger than liquidity available at the NBBO and are required to walk the book. Therefore, generally speaking, a market center that offers greater size improvement will tend to have a lower average effective spread (*i.e.,* these measures will be negatively correlated).[1255] However, as this measure contains information about both size and price, it may be difficult to disentangle information about size improvement from information about price improvement when interpreting average effective spreads.[1256] Therefore, investors that particularly value the ability of market centers to offer size improvement, such as investors trading in larger order sizes, would not have been able to use the metrics contained in reports under preexisting Rule 605 to easily discern which market center would have better handled their order according to this dimension of execution quality.[1257]

(9) IOCs

Under preexisting Rule 605 requirements, grouping IOCs together with other orders may have skewed the execution quality metrics of reporting entities that handle a large number of IOCs,[1258] which may have hindered market participants' ability to accurately compare execution quality across reporting entities.

In an analysis in the Proposing Release, the Commission found that including IOCs along with other types of market and marketable limit orders may skew the execution quality of these other order types, particularly since IOCs make up more than 90% of market and marketable share volume.[1259] In addition, several commenters stated that grouping non-marketable IOCs together with other non-marketable limit orders could skew execution quality statistics for these orders, since non-marketable IOCs also have different execution profiles.[1260]

[1252] One commenter similarly stated that ''price improvement figures reported under current Rule 605 substantially understate the benefits to retail investors provided by the current market structure.'' Virtu Letter II at 10; *see also* Robinhood Letter at 47, stating that the ''absence [of size improvement information] in Current Rule 605 reports means that execution quality is significantly undercounted.'' An analysis of data from the Tick Size Pilot B.II Market and Marketable Limit Order dataset reveals that nearly 7% of orders had sizes greater than the liquidity available at the NBBO between Apr. 2016 and Mar. 2019; *see infra* note 1545 for data description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. Specifically, the MDI Rules could result in a smaller number of shares at the NBBO for stocks in higher-priced round lot tiers, increasing the number of orders with sizes greater than the NBBO; *see supra* section IX.C.1.c)(2) for further discussion.

[1253] *See* Robert H. Battalio & Robert H. Jennings, *Wholesaler Execution Quality* (working paper Dec. 18, 2023), *available at https://ssrn.com/abstract=4304124* (retrieved from SSRN Elsevier database) (''Battalio & Jennings''). As a result, the authors estimate that incorporating information about size improvement into Rule 605 price improvement statistics would more than double estimates of price improvement for internalized orders. *See* Battalio & Jennings at 4. A previous version of this study was referenced by several commenters in support of the inclusion of size improvement information in Rule 605 reports (*see, e.g.,* Citadel Letter at 11); as well as in general support of updates to Rule 605 (*see, e.g.,* McHenry et al. Letter at 2; SIFMA Letter II at 20); *see also* Virtu Petition at 3, stating that approximately 45% of shares (and 54% of the value traded) filled by Virtu in 2020 were from orders that outsized the NBBO, and that industry-wide retail investors received approximately $7 billion in size improvement in 2020.

[1254] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75425 (Dec. 1, 2000).

[1255] For example, assume that a trader submits a marketable buy order for 100 shares to a $10.05 × $10.10 market with 100 consolidated shares available at the NBO of $10.10 and 100 consolidated shares available at the next best ask price of $10.15. In this case, the effective spread would be 2 * ($10.10 − $10.075) = $0.05, reflecting that the trader had to pay an average of $0.05 more per share than the NBBO midpoint. Now consider the situation in which the trader instead submits a marketable buy order for 200 shares to a market center (''Market Center A'') that walks the order up the book. In this case the effective spread will be twice as high, 2 * ($10.125 − $10.075) = $0.10. This higher effective spread reflects the need for Market Center A to use volume beyond the best quote to fill the order. If, on the other hand, instead of walking the 200-share order up the book, a market center (''Market Center B'') fills the entire buy order at the current NBO of $10.10; the effective spread would only be $0.05. The ability of Market Center B to execute an order for more than the displayed size at the quote is therefore reflected in an effective spread that is lower than that of Market Center A.

[1256] To illustrate, consider the example in *supra* note 1255, but, instead of 200 shares, the trader's order was for 100 shares and Market Center A executed the order with an average price dis-improvement of $0.025; the effective spread for Market Center A would similarly be $0.10. Furthermore, consider a situation in which the market is wider at $10.12 × $10.02 and Market Center B executes the 100-share order with an average price improvement of $0.025 per share, while Market Center A executes it without any price improvement. Both of these cases would lead to the same effective spreads (an effective spread of $0.10 for Market Center A, and an effective spread of $0.05 for Market Center B) as the above-described scenario in which Market Center B offered size improvement and Market Center A did not, but for situations in which the order size is less than or equal to the displayed size at the quote.

[1257] Compare the example of Market Center B offering size improvement to a 200-share order in note 1255, *supra,* to the example of Market Center B offering price improvement to a 100-share order in note 1256, *supra.* A trader that tends to submit 200-share orders would want to know a market center's ability to offer the first scenario, while a trader that tends to submit 100-share orders would want to know the market center's ability to offer the second scenario. However, in both examples the Rule 605 report would show an effective spread statistic of $0.05 for orders in the order size category of 100–499 shares, which means that these traders would not be able to use this statistic to discern a market center's execution quality according to the dimension of execution quality that they find most valuable.

[1258] *See, e.g.,* Rule 605 Citadel Letter at 7, stating that ''[a]t the moment, depending on the structure of the broker-dealer, these IOC orders [executed on SDPs] may be aggregated with retail orders for reporting purposes, even though the execution profile is very different and could negatively skew a wholesale broker-dealer's execution quality metrics.''

[1259] *See* Proposing Release, 88 FR 3786 at 3857 (tbl. 6) (Jan. 20, 2023). The analysis in the Proposing Release was based on the Tick Size Pilot B.II Market and Marketable Limit Order dataset. This dataset includes information only about market and marketable limit orders, and furthermore collected data only for small cap stocks.

[1260] *See, e.g.,* FIF Letter at 13.

To test the concern raised by these commenters, the Commission uses a sample of CAT data for 400 stocks for the period of Q3 2023 to refine its analysis of IOC orders to include non-marketable order types in addition to marketable order types.[1261] The results are presented in Table 5,[1262] and show that IOCs are a significant percentage of order flow across multiple different order types, including a large percentage of marketable limit order shares (92.6% for exchanges and ATSs, and 62.9% for wholesalers), as well as beyond-the-midpoint and at-the-midpoint shares (for exchanges and ATSs, 35.8% and 37.9%, and, for wholesalers, 90.8% and 84.2%, respectively). This reflects that IOC orders are a significant component of order flow across both marketable and non-marketable order types. In addition, IOCs indeed may have different execution quality, as, with the exception of market orders on exchanges and ATSs, a higher percentage of IOC orders execute in under one millisecond as compared to non-IOC orders. Furthermore, at wholesalers, IOC orders tend to have higher effective spreads and lower fill rates than non-IOC orders. This result supports the Commission's understanding that IOC orders received by wholesalers are typically institutional orders that are pinged in the wholesalers' SDPs to see if any contra-side volume is available,[1263] and that commingling SDP activity with other market center activity under preexisting Rule 605 requirements may have obscured differences in execution quality or distorted the general execution quality metrics for the market center.[1264] Similarly, grouping together IOC orders along with other types of market and marketable orders could have imposed a significant skew on execution quality metrics, particularly since IOCs make up a significant percentage of order flow. This may have impacted market centers' incentives to achieve better execution quality for these orders prior to these amendments.[1265]

[1261] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1181 for information about how the 400-stock sample was selected and supra note 1182 for more information about the CAT data.

[1262] This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average fill rates of these NMLO categories. *See supra* section IX.C.1.c)(2).

[1263] *See, e.g.,* Rule 605 Citadel Letter at 7, stating that ''[m]any wholesale broker-dealers execute immediate-or-cancel ('IOC') orders for non-retail investors (including pension plans, insurance companies, and other asset managers), particularly through the use of a single-dealer platform ('SDP').''

[1264] *See supra* section IX.C.3.a)(2) for further discussion of commingling SDP activity with other market center activity.

[1265] For example, if, prior to these amendments, a market center's Rule 605 reports revealed low fill rates for market orders simply because it handled a large amount of marketable IOCs, it may not have been incentivized to improve its fill rates for other types of market orders since the higher fill rates of these orders would be obscured by the low fill rates of marketable IOCs.

Table 5: Immediate-Or-Cancel (IOC) Share Volume and Execution Quality, Q1 2023

Exchanges and ATSs	Volume (% Of Total Share Volume)	IOC Volume (% Of Share Volume)	Fill Rate (%) (IOC)	Fill Rate (%) (non-IOC)	Executions Under 1 ms (%) (IOC)	Executions Under 1 ms (%) (non-IOC)	Effective Spread ($) (IOC)	Effective Spread ($) (non-IOC)
Market	<0.01%	22.3%	47.1%	94.9%	22.5%	52.6%	$0.0483	$0.0641
Marketable Limit	10.3%	92.6%	14.3%	11.6%	98.1%	80.5%	$0.0487	$0.0362
Beyond-the-Midpoint	2.2%	35.8%	0.6%	0.1%	78.2%	73.5%	$0.0165	$0.0581
At-the-Midpoint	2.0%	37.9%	2.9%	1.8%	98.1%	43.5%	-$0.0014	-$0.0004
Below-the-Midpoint	49.6%	4.7%	0.4%	0.1%	95.0%	16.5%	-$0.0954	-$0.1277
At-the-Quote	35.9%	13.3%	0.2%	1.0%	89.1%	6.5%	-$0.0291	-$0.0513
Wholesalers	**Volume (% Of Total Share Volume)**	**IOC Volume (% Of Share Volume)**	**Fill Rate (%) (IOC)**	**Fill Rate (%) (non-IOC)**	**Executions Under 1 ms (%) (IOC)**	**Executions Under 1 ms (%) (non-IOC)**	**Effective Spread ($) (IOC)**	**Effective Spread ($) (non-IOC)**
Market	28.1%	0.2%	31.7%	94.9%	85.4%	11.0%	$0.0438	$0.0344
Marketable Limit	26.9%	62.9%	18.3%	74.3%	49.3%	8.1%	$0.0420	$0.0319
Beyond-the-Midpoint	3.2%	90.8%	4.2%	66.8%	29.0%	12.6%	$0.1066	$0.0682
At-the-Midpoint	2.3%	84.2%	2.3%	50.2%	35.5%	7.0%	-$0.0010	-$0.0005
Below-the-Midpoint	6.9%	65.3%	1.5%	7.7%	12.6%	3.3%	-$0.1867	-$0.1175
At-the-Quote	32.6%	67.0%	0.9%	11.4%	73.4%	1.6%	-$0.0213	-$0.0354

This table shows the breakdown of the percentage of share volume across market, marketable limit, and three categories of non-marketable limit (beyond-the-midpoint, at-the-midpoint, below-the-midpoint, and at-the-quote) orders as percentages of order flow in terms of share volume, as well as the percentage of share volume of these order types that are submitted with IOC instructions. Also presented are fill rates (calculated as the number of shares executed, summed across all stocks and days in the sample, divided by the number of shares submitted, summed across all stocks and days in the sample), the percentage of executed orders that execute in less than one millisecond (calculated as the number of shares executed in less than one millisecond summed across all stocks and days, as a percentage of the total number of executed orders summed across all stocks and days), and share-weighted effective spreads (calculated as two times the signed difference between the midpoint and the execution price). Share weights are calculated as the number of executed shares in an order divided by the total number of executed shares summed across stocks and all days in the sample. These metrics are calculated and presented separately for IOC and non-IOC orders, and for Wholesalers and for Exchanges/ATSs. The results are obtained using a sample of CAT data for 400 stocks for Q1 2023. See supra note 1261 for data description and supra note 1200 for definitions of the NMLO categories. As discussed in supra note 1182, this analysis excludes some orders, including orders with certain handling codes and ATS-specific order types that were determined to not be eligible for Rule 605 reporting. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers reported may be different following the implementation of the MDI Rules. See supra note 1262 and section IX.C.1.c)(2).

(10) Riskless Principal Orders

The preexisting Rule 605 reporting requirements for riskless principal transactions [1266] has led to the duplicative reporting of these orders and has created uncertainty about how many orders are internalized by off-exchange market centers, particularly wholesalers.

In a riskless principal transaction, a market center routes a principal order to a second market center, typically an exchange or ATS, in order to fulfill a customer order; upon execution at the second market center, the first market center executes the customer transaction on the same terms as it received from the principal execution at the second market center. Both prior to and after these amendments, the second (executing) market center in this example will be required to report this transaction as having been executed at the market center under Rule 605(a)(1)(i)(D). However, prior to these amendments, the first (routing) market center will also report the riskless principal transaction under prior Rule 605(a)(1)(i)(D), rather under Rule 605(a)(1)(i)(E) (cumulative number of shares of covered orders executed at any other venue) [1267]

Particularly in the case of riskless principal transactions that are handled by wholesalers, grouping transactions that are handled on a riskless principal basis together with other orders executed at the market center under prior Rule 605(a)(1)(i)(D) has obscured information about the extent to which wholesalers internalize orders. Wholesalers primarily choose between two options to execute the individual investor orders that they handle: they either internalize orders by executing orders against their own inventory, or they execute orders on a riskless principal basis.[1268] While wholesalers' internalized orders are not exposed to competition from other interested parties quoting on external market centers, their riskless principal executions expose individual investor orders to trading interest from market participants other than the wholesaler, which has potential implications for differences in execution quality between these two order types. Prior to these amendments to Rule 605, both types of orders would be categorized together as orders executed at the market center under prior Rule 605(a)(1)(i)(D), so market participants would not be able to tell from Rule 605 reports whether a wholesaler internalizes the majority of its individual investor order flow, or executes the majority as riskless principal. Thus, key information that would be useful for investors (particularly individual investors, whose orders are overwhelmingly handled by wholesalers [1269]) when interpreting and comparing information about wholesalers' execution quality has not been available from Rule 605 reports.

(d) Accessibility of Rule 605 Reports

Rule 605 requires market centers to post their monthly reports on an internet website that is free of charge and readily accessible to the public.[1270] In order to collect a complete or mostly complete set of Rule 605 reports to, for example, select the reporting entity offering the best execution quality in a given stock, a market participant may incur search costs.[1271] The process of collecting Rule 605 reports may be simplified by the NMS Plan's requirement that each market center must designate a single Participant to act as the market center's Designated Participant, who is tasked with maintaining a comprehensive list of the hyperlinks provided by its market centers.[1272] Furthermore, certain reporting entities' use of third-party vendors to prepare and/or collect Rule 605 reports may also simplify the process of collecting Rule 605 reports, as these vendors typically maintain a centralized repository of the reports that they handle.[1273] There is no system or requirement, and the Commission is not adopting such a requirement, for the centralized posting of Rule 605 reports.[1274]

Rule 605 reports are designed to be machine readable, rather than human readable. While machine-readable data are useful for facilitating further processing and analysis, they are not easily consumable by market participants who do not have the access to necessary software or programming skills. Prior to these amendments, this may have limited the accessibility of Rule 605 reports, particularly for those individual investors who may be less likely to have access to these resources.[1275]

4. Markets for Brokerage and Trading Services for NMS Stocks Under Preexisting Rule 605 Disclosure Requirements

(a) Brokerage Services for NMS Stocks

(1) Current Structure of the Market for Brokerage Services

Based on information from broker-dealers' FOCUS Report Form X–17A–5 Schedule II, there were 3,494 registered broker-dealers as of Q2 2023.[1276] A

[1266] In effecting riskless principal transactions, a market center submits a principal order to another market center in order to fulfill a customer order. Upon execution at the away market center, the receiving market center executes the customer transaction on the same terms as the principal execution. *See* Securities Exchange Act Release No. 47364 (Feb. 13, 2003), 68 FR 8686 at 8690, n.33 (Feb. 24, 2003) (generally describing riskless principal transactions ''as trades in which, after receiving an order to buy (or sell) from a customer, the broker-dealer purchases (or sells) the security from (or to) another person in a contemporaneous offsetting transaction'').

[1267] *See supra* note 684 and accompanying text. In contrast, for the purposes of SIP reporting, the away market center is required to report the principal transaction to the tape, while the receiving market center would post a non-tape (regulatory or clearing-only) report to reflect the offsetting riskless customer transaction. When the initial leg of the transaction takes place on and is reported through an exchange, members are instructed not to report the customer transaction for public dissemination purposes, as that would result in double (tape) reporting of the same transaction. *See Trade Reporting Frequently Asked Questions, answers to Questions 302.2 and 302.4,* FINRA, *available at https://www.finra.org/filing-reporting/market-transparency-reporting/trade-reporting-faq* (last updated 2024).

[1268] *See infra* section IX.C.4.b) for further discussion of the market for trading services, which includes wholesalers.

[1269] *See, e.g.,* Proposing Release, 88 FR 3786 at 3839, n.614 (Jan. 20, 2023), describing a Commission analysis of Rule 606 reports that showed that, in Q1 2022, a sample of 46 retail broker-dealers routed 87.3% of orders in S&P 500 stocks and 87.9% of orders in non-S&P 500 stocks to wholesalers, as compared to 9.1% and 8.5%, respectively, to national securities exchanges.

[1270] *See* prior 17 CFR 242.605(a)(2) (requiring market centers to make their Rule 605 reports ''available for downloading from an internet website that is free and readily accessible to the public. . ..'').

[1271] One commenter stated that the current system for accessing Rule 605 reports is difficult. *See* BlackRock Letter at 4, stating that ''[c]urrently, accessing Rule 605 reports can be an onerous and time-consuming process for investors because it is widely dispersed across numerous market center websites where reports can be difficult to locate and retrieve.''

[1272] *See* Section VIII of the Rule 605 NMS Plan. For a description of ''Designated Participant'' as defined in the Plan, *see supra* note 869.

[1273] *See, e.g., Disclosure of SEC—Required Order Execution Information,* S&P Global, *available at https://vrs.vista-one-solutions.com/sec605rule.aspx* (last visited Jan. 30, 2024, 4:22 p.m.).

[1274] In May 2023, FINRA requested comment on whether to require its members to provide Rule 605 reports to FINRA for centralized publication. *See* FINRA Regulatory Notice 23–10 (May 31, 2023) (''Regulatory Notice''). FINRA stated in the Regulatory Notice that the proposed requirement to provide Rule 605 reports to FINRA would supplement, not replace, firm's current obligations under Rule 605. *See* Regulatory Notice at 3. Comments received on FINRA Regulatory Notice 23–10 are *available at https://www.finra.org/rules-guidance/notices/23-10#comments.*

[1275] *See supra* section IX.C.2 for further discussion.

[1276] The Proposing Release, which used information from broker-dealers' FOCUS Report Form X–17A–5 Schedule II as of Q2 2022, found that there were 3,498 registered broker-dealers. *See* Proposing Release, 88 FR 3786 at 3858 (Jan. 20, 2023).

portion of these broker-dealers focus their business on individual and/or institutional investors in the market for NMS stocks.[1277] These include both carrying broker-dealers, who maintain custody of customer funds and securities, and introducing broker-dealers, who accept customer orders and introduce their customers to a carrying broker-dealer that will hold the customers' securities and cash.[1278] The Commission estimates that there are approximately 153 broker-dealers that carry at least one customer trading in NMS stocks,[1279] and 1,092 broker-dealers that introduce at least one customer trading in NMS stocks.[1280]

The high level of fragmentation of NMS stock trading[1281] means that broker-dealers have a variety of choices for order routing and execution, and the venue that a broker-dealer chooses may have a tangible effect on the execution quality of an order. A broker-dealer has a legal duty to seek best execution of customer orders. The duty of best execution predates the Federal securities laws and is derived from an implied representation that a broker-dealer makes to its customers.[1282] The duty is established from ''common law agency obligations of undivided loyalty and reasonable care that an agent owes to [its] principal.''[1283] This obligation requires that a ''broker-dealer seek to obtain for its customer orders the most favorable terms reasonably available under the circumstances.''[1284]

The Commission understands that the structure of the market for brokerage services can broadly be separated into two distinct markets—brokerage services for individual investors on the one hand, and brokerage services for institutional investors on the other—that differ somewhat in terms of their market structure.

(a) Brokerage Services for Individual Investors

As of the end of 2022, there were approximately 1,006 registered broker-dealers that originated orders on behalf of individual investors in the market for NMS stocks.[1285] Unlike institutional investors, individual investors generally use a single broker to handle their orders. Retail brokers can broadly be divided into ''discount'' brokers and ''full-service'' brokers.[1286] Competition among discount brokers for the business of individual investors in particular has recently resulted in many new entrants and a decline in commissions to zero or near zero.[1287] Instead of commissions on certain transactions, these discount brokers earn revenue through other means, including, among other products and services, interest on margin accounts and from lending securities, as well as broker-wholesaler arrangements involving PFOF paid by the wholesaler to the retail broker. Discount broker-dealers can distinguish themselves by the accessibility and functionality of their trading platform, which can be geared towards less experienced or more sophisticated investors, and by providing more extensive customer service as well as tools for research and education on financial markets.

Investors may incur switching costs when changing broker-dealers, such as the cost of withdrawing or transferring funds and potential administrative fees. Switching broker-dealers could also involve time delays resulting in lost investment opportunities or revenues and other opportunity costs.[1288] Furthermore, some customers that rely on broker-dealers' non-execution-related services, such as providing recommendations, holding customers' funds and securities and/or providing analyst research, may find it more costly to switch broker-dealers, as these services would be more difficult to transfer across broker-dealers. However, the Commission understands that some broker-dealers, including some that cater to individual investors, will compensate new customers for transfer fees that their outgoing broker-dealer may charge them, which will result in lower (or even zero) switching costs.[1289]

(b) Brokerage Services for Institutional Investors

As of the end of 2022, there were approximately 837 registered broker-dealers that originated institutional orders in the market for NMS stocks.[1290]

[1277] Some broker-dealers service only the accounts of other brokers, which are excluded from the definition of customers. *See supra* note 89 for a definition of ''customer.''

[1278] *See supra* note 98 for a description of introducing and carrying broker-dealers. Some firms operate a hybrid introducing/carrying broker-dealer by introducing on a fully disclosed basis to a carrying broker-dealer those customers that trade securities for which the broker-dealer is not prepared to provide a full range of services. *See, e.g.,* Securities Exchange Act Release No. 70073 (Aug. 21, 2013), 78 FR 51910 at 51911, 51949, and 51968 (Aug. 21, 2013).

[1279] This number is based on the number of broker-dealers that report carrying at least one customer on their 2022 FOCUS Schedule I reports. The Proposing Release found the same number using 2021 FOCUS Schedule I reports. *See* Proposing Release, 88 FR 3786 at 3858 (Jan. 20, 2023).

[1280] This number is based on estimates using broker-dealers FDIDs identified in CAT data for NMS stocks during the 2022 calendar year. *See infra* note 1743 for a discussion of the data and methodology for identifying introducing broker-dealers. The Proposing Release, using CAT data for the 2021 calendar year, found that 1,110 broker-dealers introduced at least one customer trading in NMS stocks and options. *See* Proposing Release, 88 FR 3786 at 3858 (Jan. 20, 2023).

[1281] *See infra* section IX.C.4.(b)(1) for a breakdown of trading in NMS stocks across various types of trading venues.

[1282] *See, e.g., Newton* v. *Merrill, Lynch, Pierce, Fenner & Smith, Inc.,* 135 F.3d 266, 270 (3d Cir.), *cert. denied,* 525 U.S. 811 (1998).

[1283] *See id.*

[1284] *See id.; see also* Securities Exchange Act Release No. 37619A (Sept. 6, 1996), 61 FR 48290 (Sept. 12, 1996) (''Order Execution Obligations Adopting Release''). A Report of the Special Study of Securities Markets stated that ''[t]he integrity of the industry can be maintained only if the fundamental principle that a customer should at all times get the best available price which can reasonably be obtained for him is followed.'' SEC Report of the Special Study of Securities Markets, H.R. Doc. No. 95, 88th Cong., 1st Sess. Pt. II, 624 (1963) (''Special Study'').

[1285] This number is estimated using the CAT data described *infra* in note 1743. Individual investor accounts are identified in CAT as accounts belonging to the ''Individual Customer'' account type, defined as accounts that do not meet the definition of ''institution'' in FINRA Rule 4512(c) and are also not proprietary accounts. *See supra* note 1144 for more information about account types in CAT. A similar analysis in the Proposing Release found that there were 1,037 registered broker-dealers that originated individual customer account orders in the market for NMS stocks at the end of 2021. *See* Proposing Release, 88 FR 3786 at 3859 (Jan. 20, 2023).

[1286] There is not necessarily a precise delineation between full-service and discount brokers. Discount brokers generally provide execution-only services, typically at a reduced or zero commission rate. Full-service brokers (as they are commonly called) typically charge commissions in exchange for a package of services, including execution, incidental investment advice, and custody. *See, e.g.,* Interpretive Rule Under the Advisers Act Affecting Broker-Dealers, Advisers Act Release No. 2652 (Sept. 24, 2007), 72 FR 55126 at 55127, n.2, 55129, n.20 (Sept. 28, 2007).

[1287] *See, e.g.,* Samuel Adams & Connor Kasten, *Retail Order Execution Quality Under Zero Commissions* (working paper Jan. 7, 2021), *available at https://ssrn.com/abstract=3779474* (retrieved from SSRN Elsevier database), describing how ''on October 1st, 2019, Charles Schwab announced that they would cut commissions from $4.95 per trade to zero on all retail trades starting on October 7th. Within hours, TD Ameritrade followed by announcing they would cut commissions to zero from $6.95 beginning on October 3rd. By January 3rd, Vanguard, Fidelity, and E*TRADE had joined the trend in offering free equity trades for retail investors.''

[1288] *See, e.g., Understanding the Brokerage Account Transfer Process,* FINRA, *available at https://www.finra.org/investors/learn-to-invest/brokerage-accounts/understanding-brokerage-account-transfer-process* (last visited Jan. 30, 2024, 4:30 p.m.).

[1289] *See, e.g.,* Chad Morris, *ACAT Fee: Account Transfer Fee in 2024,* Brokerage-Review.com, *available at https://www.brokerage-review.com/discountbroker/acat-account-transfer-fees.aspx* (last updated Nov. 16, 2023) (providing a list of fees for different brokers).

[1290] This number is estimated using the CAT data described in *infra* note 1743. Institutional investor accounts are identified in CAT as accounts belonging to the ''Institutional Customer'' account type, defined as accounts that meet the definition in FINRA Rule 4512(c). *See supra* note 1144 for more information about account types in CAT. A similar analysis in the Proposing Release found that there were 909 registered broker-dealers that

One feature that distinguishes the market for institutional brokerage services is that a significant portion of institutional investor orders are generally ''not held'' orders.[1291] A broker-dealer has time and price discretion in executing a not held order, and institutional investors in particular rely on such discretion for various reasons including minimizing price impact.[1292] Due to the large size of institutional trading interests, broker-dealers will often split orders when handling their orders, often through the use of SORs. Specifically, a broker-dealer or its SOR will split up a ''parent'' order into multiple ''child'' orders, with the goal of executing the child orders in a way that achieves the best execution for the parent order.[1293] For example, a broker-dealer might not execute a child order at the best price, if doing so could result in a larger price impact and increases the overall cost of working a parent order. For this reason, most institutional parent orders are handled by broker-dealers on a not held basis, which would exclude these orders from Rule 605 execution quality disclosure requirements.[1294] However, since 2018, broker-dealers are required by Rule 606(b)(3) to provide individualized reports of execution quality of not held orders upon request.[1295]

The Commission understands that some investors, particularly some institutional investors, are likely to use multiple broker-dealers,[1296] which could lead to lower switching costs. For example, a customer that is unhappy with one broker-dealer could use one of its other broker-dealers to handle those orders, providing that this does not raise other costs.

(2) Competition Among Broker-Dealers on the Basis of Execution Quality

Broker-dealers compete with one another along a variety of dimensions,[1297] including the execution quality that they offer, and make their execution quality known in a variety of ways. For example, at least one broker-dealer published execution quality reports using the FIF template,[1298] and furthermore some broker-dealers disclose their own execution quality metrics on their websites.[1299] Broker-dealers may seek to improve their competitive position on the basis of execution quality by, for example, investing in the speed and quality of their routing technology. Broker-dealers may also compete on the basis of execution quality by reevaluating their routing strategies to increase the extent to which they route orders to the market centers offering better execution quality.

When making routing decisions, some broker-dealers may face conflicts of interest that arise when their interests are not aligned with their customers' interest in receiving better execution quality.[1300] These conflicts of interest could result, for example, from broker-dealer affiliations with market centers. Some broker-dealers operate or are otherwise affiliated with ATSs, which may present a possible conflict of interest relative to their customers' interests if these broker-dealers give preference to routing orders to their own ATSs, where they typically pay lower transaction fees, even if their customer would have received better execution quality if the order were routed to another trading venue. One academic study found that certain broker-dealers that route more orders to their affiliated ATSs are associated with lower execution quality.[1301] Similarly, the presence of liquidity fees and rebates at some market centers may incentivize broker-dealers to make routing decisions based on where they can receive the highest rebate (or pay the lowest fee), rather than where they can receive better execution quality on behalf of their customer.[1302] For example, a recent research paper analyzed the relationship between maker-taker fee schedules and order routing, and found a negative relation between take fees and limit order execution quality.[1303] Another potential conflict of interest, particularly with regard to individual investor order flow, includes the receipt of PFOF, which may result in broker-dealers routing orders to wholesalers as a result of the terms of the PFOF arrangements.[1304]

If information asymmetries, such as those resulting from insufficient public information about broker-dealer execution quality,[1305] prevent investors from observing differences in execution quality across broker-dealers, this limits the extent to which broker-dealers need to compete on the basis of execution quality.

(b) Trading Services for NMS Stocks

(1) Current Structure of the Market for Trading Services

originated institutional customer account orders in the market for NMS stocks at the end of 2021. *See* Proposing Release, 88 FR 3786 at 3859 (Jan. 20, 2023).

[1291] *See supra* note 1002 discussing an analysis showing that institutional investors are more likely than individual investors to use not held orders.

[1292] *See* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58343 (Nov. 19, 2018). Meanwhile, a broker-dealer must attempt to execute a held order immediately, which typically better suits individual investors who seek immediate executions and rely less on broker-dealer order handling discretion.

[1293] *See* Tyler Beason & Sunil Wahal, *The Anatomy of Trading Algorithms* (working paper Jan. 21, 2021), *available at https://ssrn.com/abstract=3497001* (retrieved from SSRN Elsevier database) (''Beason & Wahal'').

[1294] Some child orders may be held orders and thus will be required to be included in Rule 605 reports. *See supra* note 4 (discussing held and not held orders).

[1295] *See supra* note 1003 and accompanying text discussing broker-dealer requirements under Rule 606(b)(3) to provide individualized reports of execution quality upon request for not held orders.

[1296] For example, one academic paper finds that institutional investors tend to break up larger orders and spread them out across multiple broker-dealers, as a strategy to avoid information leakage. *See, e.g.,* Munhee Han & Sanghyun (Hugh) Kim, *Splitting and Shuffling: Institutional Trading Motives and Order Submissions Across Brokers* (working paper Sept. 30, 2020), *available at https://ssrn.com/abstract=3429452* (retrieved from SSRN Elsevier database).

[1297] For example, broker-dealers may compete by charging lower commissions for trading, or by offering a wider range of services or functionalities, such as trading in additional asset classes such as options.

[1298] *See supra* note 973.

[1299] *See id.* for examples.

[1300] *See supra* section IX.C.3.(a)(1).

[1301] *See* Amber Anand et al., *Institutional Order Handling and Broker-Affiliated Trading Venues,* 34 Rev. Fin. Studies 3364 (2021).

[1302] *See, e.g.,* Robert H. Battalio et al., *Can Brokers Have It All? On the Relation Between Make-Take Fees and Limit Order Execution Quality,* 71 J. Fin. 2193 (2016).

[1303] *See id.* The authors ''document a strong negative relation between take fees and several measures of limit order execution quality. Based on this evidence, [they] conclude that the decision of some national brokerages to route all nonmarketable limit orders to a single exchange paying the highest rebate is not consistent with the broker's responsibility to obtain best execution for customers.''

[1304] The study by Schwarz et al. (2023), supra note 1064, does not find a relationship between the amount of PFOF a retail broker receives and the amount of price improvement its customers' orders receive. However, the authors stated that the variation in the magnitude of price improvement they saw across retail brokers was significantly greater than the amount of PFOF the retail broker received, which could indicate their sample was not large enough to observe a statistically significant effect. Lynch (2022) reports a broker deriving high PFOF revenues provides small price improvements to customer orders, while a broker deriving low PFOF revenue offers large price improvement. See supra note 1064.

[1305] *See supra* section IX.C.3.(a)(1) discussing broker-dealers' execution quality reporting requirements prior to these amendments to Rule 605.

Trading services for NMS stocks are highly fragmented among different types of market centers.[1306] Table 6 [1307] shows that in Q1 of 2023, NMS stocks were traded on 16 national securities exchanges and off-exchange at 33 NMS Stock ATSs and at 228 other FINRA members, including 6 wholesalers that internalize the majority of individual investor marketable orders.[1308] During Q1 of 2023, an average of over 11.7 billion shares ($522 billion notional) were traded daily in NMS stocks.[1309] National securities exchanges executed approximately 56% of total share volume in NMS stocks (59% of total notional volume), while off-exchange market centers executed approximately 44% of total share volume (41% of total notional volume).[1310] The majority of off-exchange volume is executed by wholesalers, who execute over one quarter of total share volume (26.9%) and about 61% of off-exchange volume. Some OTC market makers, such as wholesalers, operate SDPs through which they execute institutional orders in NMS stocks against their own inventory.[1311] SDPs accounted for approximately 4% of total trading volume in Q1 2023.[1312] As of June 2023, the Commission estimates that there are currently 228 market centers to which Rule 605 applies.[1313]

Table 6: NMS Stock Traded Share Volume Percentage by Market Center Type

Market Center Type	Venue Count	Share Volume (% of Total Volume)	Off-Exchange Share Volume (% of Total Off-Exchange)
NMS Stock ATSs	33	10.7%	24.2%
National Securities Exchanges	16	55.9%	-
Wholesalers	6	26.9%	60.9%
Other FINRA Members	222	6.6%	15.0%

This table reports the percentage of all NMS stock executed share volume and the percentage of NMS stock share volume executed off-exchange for different types of market centers for Q1 2023, including the number of venues in each market center category. Exchange share volume and total market volume are based on CBOE Market Volume Data on monthly share volume executed on each exchange available at: https://cboe.com/us/equities/market_statistics/historical_market_volume/. NMS Stock ATS, wholesaler and FINRA member share volume are based on monthly data from FINRA OTC (Non-ATS) Transparency Data Monthly Statistics, available at: https://otctransparency.finra.org/otctransparency/OtcData; and FINRA ATS Transparency Data Monthly Statistics, available at: https://otctransparency.finra.org/otctransparency/AtsBlocksDownload. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers reported may be different following the implementation of the MDI Rules. See supra note 1310 and section IX.C.1.c)(2).

Market centers' primary customers are the broker-dealers that route their own orders or their customers' orders for execution at the trading venue, and market centers compete with each other for their members' customers' flow on a number of dimensions, including execution quality. Broker-dealers may face switching costs from changing the primary trading venues to which they route orders. For example, the extent to which broker-dealers may have arrangements to route orders to specific market centers could hamper their ability to switch trading venues.[1314] Incentives related to the common practice across national securities exchanges of setting fee and rebate schedules where specific tiers are determined by execution volume [1315]

[1306] Some academic studies attribute the highly fragmented nature of this market to implementation of Regulation NMS. *See, e.g.,* Maureen O'Hara & Mao Ye, *Is Market Fragmentation Harming Market Quality?,* 100 J. Fin. Econ. 459 (2011); Amy Kwan et al., *Trading Rules, Competition for Order Flow and Market Fragmentation,* 115 J. Fin. Econ. 330 (2015).

[1307] The data used in this analysis have been updated from the Proposing Release for a more recent time period. *See* Proposing Release, 88 FR 3786 at 3861 (tbl. 7) (Jan. 20, 2023), which presents the same statistics for Q1 2022. They are comparable to those for Q1 2023. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis.

[1308] *See* Concept Release on Equity Market Structure, 75 FR 3594 at 3598–3600 (Jan. 21, 2010) (for a discussion of the types of trading centers); *see also Form ATS–N Filings and Information* (Modified Jan. 18, 2024), *available at https://www.sec.gov/divisions/marketreg/form-ats-n-filings.htm.* These wholesalers were determined based on marketable order routing information from retail broker Rule 606(a)(1) reports.

[1309] Average daily share and notional trading volume in NMS stocks are based on CBOE Market Volume Data on monthly share volume executed on each exchange *available at: https://cboe.com/us/equities/market_statistics/historical_market_volume/.*

[1310] This analysis uses data from prior to the implementation of the MDI Rules. The implementation of the MDI Rules may result in a change in the flow of orders across trading venues, which may result in numbers that are different from those reported here. However, the Commission is uncertain of the magnitude of these effects. *See supra* section IX.C.1.c)(2) for further discussion.

[1311] *See* Rosenblatt Securities, *US Equity Trading Venue Guide* (2023). Wholesalers and OTC market makers can execute orders themselves or route orders to be executed on other venues. An SDP always acts as the counterparty to any trade that occurs on the SDP. *See, e.g., Where Do Stocks Trade?,* FINRA (Dec. 3, 2021), *available at https://www.finra.org/investors/insights/where-do-stocks-trade.*

[1312] *See* Rosenblatt Securities, *US Equity Trading Venue Guide* (2023).

[1313] *See supra* section VIII.C for a discussion of this estimate. Some market centers may not be required to prepare Rule 605 reports, for example, if they do not handle any covered orders.

[1314] In addition, one commenter stated that switching costs for broker-dealers ''could be for the time and cost of monitoring, limits imposed on maximum or minimum market share, technology limitations, and so forth.'' Huang et al. Letter at 7.

[1315] Some national securities exchanges typically currently use volume calculated on a monthly basis to determine the applicable threshold or tier rate. *See, e.g.,* fee schedules of NASDAQ PSX (Adopted Feb. 3, 2020), *available at https://listingcenter.nasdaq.com/rulebook/phlx/rules/Phlx%20*

may also make it difficult for broker-dealers to transfer order flow between market centers,[1316] particularly intra-month as exchange volume-based transaction pricing is assessed on a monthly basis. Volume-based tiering gives broker-dealers an incentive to concentrate orders on a given exchange, not because that exchange may offer the best execution quality but because doing so can allow a broker-dealer to execute sufficient volume on the exchange to qualify for a better tier and receive a lower fee or higher rebate. In addition, for national securities exchanges, upfront connectivity fees associated with establishing a connection to a new exchange could also discourage switching.

While national securities exchanges cater to a broader spectrum of investors, ATSs and OTC market makers, including wholesalers, tend to focus more on providing trading services either for institutional or for individual investor order flow. For example, an analysis of retail brokers' routing practices showed that a group of six wholesalers handled more than 87% of the customer orders of retail brokers in Q1 2022.[1317] Meanwhile, SDPs are mainly used for the execution of institutional orders, to potentially reduce the order's price impact and avoid triggering significant reactions by other market participants.[1318]

(2) Competition Between Trading Venues on the Basis of Execution Quality

Trading venues compete with one another on the basis of the execution quality that they offer, as well as on the basis of other potential factors.[1319] As discussed above, Rule 605 reports have been a useful proxy that investors and their broker-dealers can use to assess and compare the execution quality that they can expect to receive across market centers,[1320] and there is evidence that broker-dealers factor in information about the execution quality of market centers from Rule 605 reports when making their order routing decisions. One academic study attributes a significant decline in effective and quoted spreads following the implementation of Rule 605 to an increase in competition among market centers, which improved the execution quality that they offered in order to attract more order flow.[1321] Market centers may seek to improve their competitive position on the basis of execution quality by, for example, investing in the speed and quality of their execution technology.

As discussed above, if information asymmetries, such as those resulting from insufficient public information about broker-dealer execution quality, prevent investors from observing differences in execution quality across broker-dealers, this limits the extent to which broker-dealers need to compete on the basis of execution quality.[1322] Market centers have less of an incentive to compete and innovate on execution quality to the extent that broker-dealers route orders for reasons other than execution quality. Market centers also have less of an incentive to compete on the basis of execution quality to the extent that broker-dealers and other market participants are less able to use Rule 605 reports to compare execution quality across market centers, for example, as a result of erosions to the information content of Rule 605 statistics due to changes in market conditions,[1323] or to the extent that Rule 605 does not include some relevant order sizes or types.[1324]

D. Economic Effects

The amendments expanding and modifying the reporting requirements under Rule 605 will result in numerous beneficial economic effects. These economic effects will mainly derive from improvements in the transparency of execution quality of broker-dealers and market centers, which will promote competition among these reporting entities on the basis of execution quality. These amendments to Rule 605 will also result in initial and ongoing compliance costs to reporting entities.

This section measures the economic effects of these amendments to Rule 605 relative to a regulatory baseline that includes the implementation of the MDI Rules [1325] and reflects the Commission's assessment of the anticipated economic effects, including potentially countervailing or confounding economic effects from the MDI Rules.[1326] However, given that the MDI Rules have not yet been implemented, they have not affected market practice and therefore data required for a quantitative analysis of the economic effects that includes the effects of the MDI Rules is not available. It is possible that the economic effects relative to the baseline can be different once the MDI Rules are implemented. Where implementation of the above-described MDI Rules may affect certain numbers, the description of the economic effects below notes those effects.

1. Benefits

These amendments to Rule 605 will promote increased transparency of order execution quality, particularly for larger broker-dealers who were not required to disclose execution quality information under preexisting Rule 605, but also for all reporting entities, whose execution quality information will be more relevant and easier to access because of improvements to existing Rule 605 disclosure requirements.

This increased transparency, together with increased competition resulting from this transparency, will result in improvements in execution quality, for several reasons. First, investors and their broker-dealers will be able to make

Equity%207 (as of July 2022) (calculating fees based on ''average daily volume during the month''); and *Cboe* EDGA, *EDGA Equities Fee Schedules (Effective Jan. 2, 2024), available at https://www.cboe.com/us/equities/membership/fee_schedule/edga/* (as of Apr. 1, 2022) (calculating fees based on ''average daily volume'' and ''daily volume'' on a monthly basis).

[1316] The Commission recently proposed to prohibit national securities exchanges from offering volume-based transaction pricing in connection with the execution of agency-related orders in certain stocks. *See* Securities Exchange Act Release No. 98766, 88 FR 76282 (Nov. 6, 2023) (Volume-Based Exchange Transaction Pricing for NMS Stocks).

[1317] *See* Proposing Release, 88 FR 3786 at 3861, n.772 (Jan. 20, 2023) and accompanying text.

[1318] *See, e.g.,* Yashar H. Barardehi, et al., *Internalized Retail Order Imbalances and Institutional Liquidity Demand* (working paper revised Jan. 2, 2023), *available at https://ssrn.com/abstract=3966059* (retrieved from SSRN Elsevier database).

[1319] For example, national securities exchanges may adjust fees and rebates to incentivize broker-dealers to route more order flow to them. The use of liquidity rebates has also allowed national securities exchanges to compete with each other and with off-exchange market centers for order flow. Specifically, to the extent that the liquidity rebates facilitate more competitive quotes by liquidity providers (which may or may not occur for stocks that are neither tick-constrained nor thinly traded, but rather are priced at a level where a rebate of approximately $0.0030 could influence a displayed quote), these rebates can make it more expensive to offer price improvement over the displayed NBBO. *See* Transaction Fee Pilot for NMS Stocks, 84 FR 5202 at 5255 (Feb. 20, 2019).

[1320] *See supra* section IX.C.2.

[1321] *See* Zhao & Chung, *supra* note 16.

[1322] *See supra* section IX.C.2.a).

[1323] For example, market centers may be less incentivized to compete on the basis of execution speed to the extent that, as a result of rapid increases in the speed of trading, market participants are less able to use time-to-execution measures from Rule 605 reports to compare across market centers. *See supra* section IX.C.3.c)(4) for further discussion.

[1324] For example, market centers may be less likely to compete on the basis of execution quality for orders of less than 100 shares, since these orders were previously not required to be included in Rule 605 reports. *See supra* section IX.C.3.b)(1)(a) for further discussion.

[1325] *See supra* section IX.C.1.(c)(2).

[1326] *See supra* section IX.C.1.(c)(2) for a discussion of the Commission's anticipated economic effects of the MDI Rules as stated in the MDI Adopting Release.

better informed decisions about where to route their orders to achieve better quality execution. Second, these amendments are expected to increase the extent to which broker-dealers compete on the basis of execution quality in order to attract and retain customers, as well as the extent to which market centers must compete on the basis of execution quality to attract and retain order flow.[1327] The Commission expects that this increase in competition will lead to improvements in execution quality as a result of improvements to broker-dealer routing practices and improvements to market centers' execution practices. These economic mechanisms will lead to improvements to overall levels of execution quality, as well as improvements to particular components of execution quality, such as execution prices, execution speeds, size improvement, and fill rates.[1328]

The following sections will discuss the expected benefits of these amendments for transparency, competition, and execution quality, including those expected from expanding the scope of reporting entities, modernizing the required information, and improving accessibility. The Commission acknowledges that there may be limitations to these benefits and discusses these below, though none will significantly reduce the benefits of the amended rule.

(a) Expanding the Scope of Reporting Entities

(1) Expanding Requirements for Larger Broker-Dealers

As a primary effect, the adopted amendment expanding the scope of Rule 605 reporting entities to include larger broker-dealers [1329] will increase transparency into the differences in execution quality achieved by these broker-dealers when they route customer orders to execution venues.[1330] This increase in transparency will increase the extent to which both broker-dealers and market centers compete on the basis of execution quality, which will result in improvements in execution quality.

First, as a result of the adopted amendment, customers of larger broker dealers, along with other market participants, will no longer need to make inferences about their broker-dealers' execution quality based on routing information from Rule 606 data combined with market centers' execution quality information from Rule 605 data, but will instead have access to direct information about the aggregate execution quality achieved by their broker-dealers.[1331] Customers will then be able to use this information to compare across broker-dealers and select those broker-dealers offering better execution quality. Furthermore, combined with information about broker-dealers' payment relationships with execution venues in quarterly reports prepared pursuant to Rule 606(a)(1), information about the aggregate execution quality obtained by larger broker-dealers that are in the business of routing customer orders will give market participants and other interested parties access to key information that will facilitate their ability to evaluate how these payment relationships may affect execution quality. The flow of customers to the broker-dealers that provide better execution quality will improve the execution quality of customers that route their orders to those broker-dealers.

This increase in market participants' ability to compare execution quality across broker-dealers will increase the extent to which broker-dealers compete on the basis of execution quality when making their order routing decisions.[1332] Broker-dealers will increase their competitive position with respect to execution quality by investing in or otherwise adjusting their routing practices to increase the extent to which they route orders to the market centers offering better execution quality and limit the extent to which they route orders for other potential reasons.[1333] For example, broker-dealers that face conflicts of interest that arise when their interests are not aligned with their customers' interests may be better incentivized to manage these conflicts as a result of an increase in their need to compete on the basis of execution quality.[1334] Specifically, to the extent that broker-dealers lose customer order flow as a result of their offering lower execution quality, these broker-dealers are expected to base more of their routing decisions on the execution quality of market centers, rather than on which market centers are more likely to benefit them (*e.g.,* because of higher PFOF or lower access fees). This is expected to promote the flow of orders to market centers that provide better execution quality. The flow of orders to those market centers offering better

[1327] Several commenters stated that enhancing Rule 605 reporting requirements would generally lead to increased competition on the basis of execution quality. *See, e.g.,* Better Markets Letter at 1–2; NASAA Letter at 5; Fidelity Letter at 7; Healthy Markets Letter at 5; *see also infra* note 1330 and corresponding text for additional statements from commenters on the impact of the expansion of Rule 605 reporting requirements to include larger broker-dealers on competition among broker-dealers.

[1328] As discussed in the Proposing Release, the magnitude of improvements in order execution quality that individual and institutional investors experience under the amended rule may be lower after the MDI Rules are implemented, relative to the pre-implementation baseline. The availability of faster consolidated market data with more data on odd-lot information and depth of book information from competing consolidators could result in improved execution quality for customers' orders, if their broker-dealers currently utilize SIP data and switch to consuming the expanded consolidated market data. However, there is uncertainty with respect to how the benefits of the amended rule will be changed. Specifically, there is uncertainty regarding the magnitude of price improvement that wholesalers will provide to retail investors when the MDI Rules are implemented, as well as uncertainty regarding how the NBBO midpoint will change for stocks with prices above $250 when the MDI Rules are implemented. These amendments to Rule 605 will still lead to improvements in individual and institutional investor order execution quality, as well as improvements in price discovery, relative to a baseline in which the MDI Rules are implemented. *See* Proposing Release, 88 FR 3786 at 3872 (Jan. 20, 2023).

[1329] *See supra* section II.A for further discussion of the amendments related to the expansion of Rule 605 reporting entities to include larger broker-dealers.

[1330] These effects will principally accrue to larger broker-dealers, who will be required to prepare Rule 605 reports, but may spill over to effect smaller broker-dealers as well. *See* discussion in *infra* section IX.D.1.d)(1). Several commenters stated that expanding the scope of Rule 605 reporting requirements to include larger broker-dealers will benefit transparency. *See, e.g.,* Nasdaq Letter at 43. One commenter, while generally agreeing that expanding the scope to broker-dealers will improve transparency, described the importance of ''enabl[ing] retail brokers to provide background information contextualizing how their obligations are different from those of wholesalers or other market centers that currently report under Rule 605.'' Virtu Letter II at 3–4. As stated in the Proposing Release and repeated *infra* this section, while differences in certain statistics for broker-dealers as compared to market centers may be more reflective of differences in business models rather than effectiveness in achieving execution quality, the Commission understands that these differences are well-known and are taken into account by market participants when evaluating execution quality statistics. *See* Proposing Release, 88 FR 3786 at 3800 (Jan. 20, 2023).

[1331] This effect will be enhanced by the requirement that broker-dealers publish Rule 605 reports for their broker-dealer activities separately from activities related to the market center(s) that they may operate, which will allow investors to access execution quality information that is exclusively related to the firm's broker-dealer operations. *See supra* section II.A.2.b) for further discussion.

[1332] Several commenters stated that expanding the scope of Rule 605 reporting requirements to include larger broker-dealers would increase competition among broker-dealers. *See, e.g.,* Fidelity Letter at 7–8; Rule 605 Citadel Letter at 4; CCMR Letter at 14–15; NASAA Letter at 6.

[1333] The magnitude of the improvements in order routing practices under the final rule may be lower when the MDI Rules are implemented. *See supra* note 1328.

[1334] *See supra* section IX.C.3.(a)(1) for a discussion of potential conflicts of interest in broker-dealer routing decisions.

execution quality may also result in further improvements in execution quality for those customers, as liquidity externalities and the consolidation of orders onto high-quality market centers will increase the liquidity of these venues.[1335]

These amendments will require larger broker-dealers to report the same execution quality information as market centers, including information about execution prices, execution speeds, and fill rates,[1336] as well as, under these amendments, information about size improvement.[1337] By requiring larger brokers-dealers to report stock-by-stock order execution information in a uniform manner, these amendments will make it possible for market participants and other interested parties to make their own determinations about how to group stocks or orders when comparing execution quality across broker-dealers. By allowing market participants and other interested parties to conduct their own analysis based on alternative categorizations of the underlying data, requiring larger broker-dealers to produce more detailed execution quality data will also help ameliorate potential concerns about overly general statistics as well as the specific categorization of orders and selection of metrics in the newly required summary reports.

The Commission is mindful that Rule 605's execution quality reports contain a large volume of statistical data, and, as a result, it may be difficult for individual investors to review and digest the reports. Should certain market participants not have the means to directly analyze the detailed statistics,[1338] independent analysts, consultants, broker-dealers, the financial press, and market centers likely will continue to respond to the needs of investors by analyzing the disclosures and producing more digestible information using the data.[1339] Furthermore, requiring larger broker-dealers, along with market centers, to prepare summary reports with aggregated execution quality information,[1340] in addition to the more detailed Rule 605 reports, will furnish more direct access to useful data for some market participants.

The adopted amendment requiring larger broker-dealers to report both the number of shares executed at the receiving broker-dealer and the number of shares executed at any other venue [1341] will help ensure that Rule 605 reports capture the execution quality of all orders that larger broker-dealers receive for execution as part of their customer-facing broker-dealer function. The majority of executions resulting from a firm's broker-dealer operations will likely be categorized as away-executed shares in the Rule 605 reports associated with its broker-dealer operations.[1342] While these shares will not be categorized as being directly executed by the broker-dealer, it is likely that market participants understand that execution quality can depend significantly on the broker-dealers' order handling and routing practices.

Several commenters did not support expanding the scope of Rule 605 reporting entities to include larger broker-dealers.[1343] One commenter disagreed that the expansion of scope would increase competition among broker-dealers, because ''[d]ifferences in execution quality could be the result of a myriad of factors, including the customers the two different brokers serve and the equities the customers trade.'' [1344] This commenter stated that ''if differences in reported execution quality statistics are reflective of different business models rather than actual differences in execution quality . . . producing Rule 605 statistics (particularly in the summary reports most likely to be used by retail investors) without accounting for different broker-dealer business models could lead investors to make incorrect decisions regarding broker-dealer selection.'' [1345]

First, the Commission agrees that, as a result of different business models, a particular broker-dealer's order flow may be made up of a different mixture of securities, order types, and order sizes, which may impact or constrain that broker-dealer's overall execution quality level.[1346] For example, Figure 15, which uses a sample of CAT data from Q1 2023 [1347] to break down broker-dealer order flow into different order types, shows that broker-dealers indeed handle a variety of order types, including both marketable and non-marketable orders, for both their individual and institutional investor customers.[1348]

[1335] However, liquidity externalities may have adverse effects on the competition among market centers if they result in the exit of some market centers. *See infra* section IX.D.1.(d)(4) for a discussion.

[1336] *See supra* section IX.C.1.(a) for a discussion of the economic significance of the execution quality information currently required by Rule 605 to be disclosed by market centers.

[1337] *See* final 17 CFR 242.605(a)(1)(ii)(R) and (S) and discussion in *supra* section III.B.4.(e).

[1338] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75419 (Dec. 1, 2000) (stating that most individual investors likely would not obtain and digest the reports themselves); *see also* discussion *infra* section IX.D.1.(b)(3).

[1339] *See, e.g., supra* notes 1076–1077, describing the use of Rule 605 data in academic literature, in comment letters related to Commission and SRO rulemaking, and the financial press. One commenter stated that ''even though a certain percentage of retail investors may not read the Rule 605 reports, they will still benefit indirectly as the enhanced disclosure will . . . facilitate use by third-party researchers and academics, who in turn can extract information from the reports and use it to expose issues and problems with today's order routing and execution practices.'' Better Markets Letter at 9–10.

[1340] *See* final 17 CFR 242.605(a)(2).

[1341] *See* final 17 CFR 242.605(a)(1)(i)(E) and (F). As discussed herein, the Commission is amending the rule to also cover the number of shares executed at the receiving broker or dealer.

[1342] To the extent that a broker-dealer also acts as a market center, any executions that it handles will be required to be published in the Rule 605 report(s) that it files in its capacity as a market center. *See supra* section II.A.2.(b) for further discussion.

[1343] *See, e.g.,* Schwab Letter II at 34–35; Schwab Letter III at 2; and SIFMA Letter II at 30. One commenter did not support expanding the scope of Rule 605 to include larger broker-dealers because it instead supported expanding the reporting requirements under Rule 606 to included broker-dealer execution quality information. *See* Robinhood Letter at 39; *see infra* section IX.E.5.(b) for a discussion of this as a reasonable alternative.

[1344] *See* SIFMA Letter II at 30.

[1345] *See* SIFMA Letter II at 30; *see also* Schwab Letter II at 35, stating that ''[i]f differences in E/Q are a result of different business models employed across firms rather than actual differences in E/Q among comparable business models, providing this information in a way that appears to be—but is not—an apples-to-apples comparison would create investor confusion rather than provide useful information on which to base decisions,'' and Cambridge Letter at 7, stating that requiring larger retail broker-dealers to produce execution quality reports ''is likely to lead to misaligned, misleading comparisons between totally different entities.''

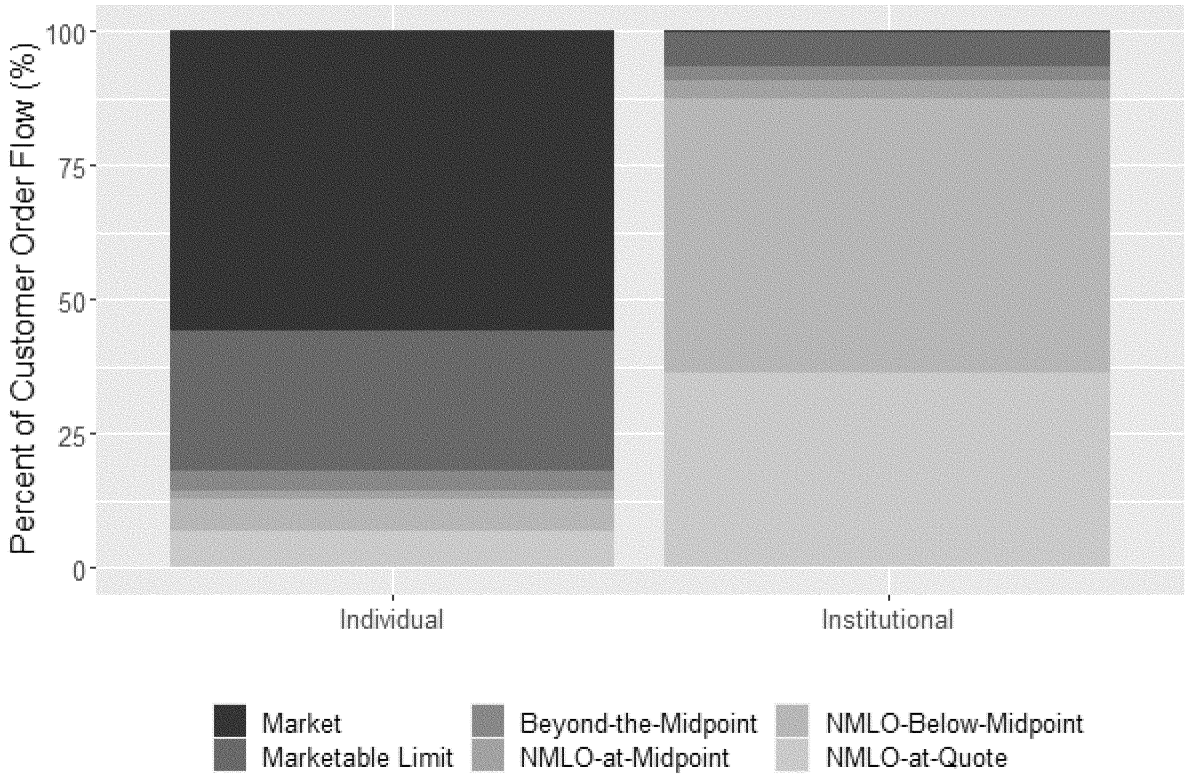
[1346] *See* Proposing Release, 88 FR 3786 at 3831 (Jan. 20, 2023); *see also supra* note 984 for an example of how differences in order flow characteristics may impact inferences about execution quality.

[1347] *See supra* note 1182 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. *See supra* section IX.C.1.(c)(2).

[1348] This CAT data used in this analysis have been updated from the Proposing Release for a longer and more recent time period, as well as to include a larger sample of broker-dealers. The methodology has also been updated to include only those NMLOs that are immediately executable upon receipt (*i.e.,* NMLOs priced at the quote or better). The analysis in the Proposing Release used a week of CAT data from Jan. 2022 to break down orders from 58 retail broker-dealers into different order types and similarly showed that broker-dealers indeed handle a variety of order types, including both marketable and non-marketable orders, for both their individual and institutional investor customers. *See* Proposing Release, 88 FR 3786 at 3863 (fig. 14) (Jan. 20, 2023). The distribution of order flows across order types is somewhat different in the analysis in the Proposing Release, including a much lower rate of market orders, particularly for individual customer accounts. This is likely because of the difference in order flow characteristics between the 58 retail broker-dealers in the Proposing Release sample, and the larger sample of 85 broker-dealers with 100,000 or more customer in the present analysis. These changes did

Continued

Figure 15: Broker-Dealer Order Volume by Order Type, Q1 2023



This figure shows the distribution of customer order flow, in terms of the percentage of the total number of submitted orders, across different order types for both individual and institutional customer accounts, using a sample of CAT data for 400 stocks for Q1 2023. Percentages are calculated as the number of orders originated by given account type and within a given order type category handled by broker-dealers, summed across all stocks and days in the sample, divided by the total number of orders originated by a given account type handled by broker dealers, summed across all stocks and days See supra note 1182 for dataset description and supra note 1200 for definitions of the NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra section IX.C.1.c)(2).

However, under these amendments, larger broker-dealers will be required to categorize the execution quality information required by Rule 605 by individual security, different types of orders, and different order sizes. Larger broker-dealers will also be required to report realized spread, which is a measure of adverse selection.[1349] Giving market participants access to this information in Rule 605 reports will help ensure that they are able to control for these differences in order flow characteristics and make apples-to-apples comparisons when assessing and comparing execution quality information across broker-dealers.[1350] Furthermore, customers that primarily rely on broker-dealers' summary reports will also be able to use information from the summary reports to control for differences in broker-dealer order flow in terms of order sizes, average stock price and realized spreads.[1351] Second, to the extent that customers value and emphasize execution quality when deciding among broker-dealers, a decision to switch broker-dealers based on execution quality information as contained in Rule 605 reports will not be an ''incorrect'' one as stated by a commenter.[1352] Customers will continue to be able to evaluate their broker-dealers across a range of services, including those other than execution quality, such as commissions or user-friendliness,[1353] though they will be better able to factor execution quality into their decisions.[1354]

One commenter stated that ''it is not apparent that [requiring larger brokers to report on order execution quality] would improve retail execution quality, as the retail broker market is highly

not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that broker-dealers indeed handle a variety of order types, including both marketable and non-marketable orders, for both their individual and institutional investor customers.

[1349] *See supra* note 1229 and corresponding text for a discussion of realized spreads as a measure of adverse selection risk.

[1350] That some of the information contained in the summary execution quality report will be useful for controlling for differences across differences in order flow characteristics of broker-dealer was supported by comment. *See, e.g.,* comments in support of including average notional order size and average realized spreads in the summary reports, discussed in notes 1592–1593 *infra.*

[1351] *See supra* section IV.B.1.(b) for a discussion of the statistics that will be required to be reported in Rule 605 summary execution quality reports.

[1352] *See* SIFMA Letter II at 30.

[1353] *See supra* section IX.C.4.(a)(1) for further discussion of the additional services offered by broker-dealers.

[1354] At the same time, the Commission acknowledges that the expected benefits from the amendments to Rule 605, such as increased competition among broker-dealers, may be lessened to the extent that there are dimensions of execution quality not captured by Rule 605 reports which drive order handling decisions. *See infra* section IX.D.1.(d)(5) for a discussion.

competitive.'' [1355] The commenter went on to state that ''to the extent that there are unexploited opportunities to improve execution quality for retail investors, as the Commission has claimed in its release, empowering investors to compare execution quality across retail brokers (and consequently to switch brokers based on this information) could be the most efficient and effective way to address concerns about execution quality.'' Routing decisions affect the execution quality that broker-dealer customers' orders receive, leading to significant variations in execution quality across broker-dealers, and studies have documented a large variation in retail broker-dealer execution quality, even for identical orders.[1356] Another commenter stated that recent academic findings ''emphasize the need for further price execution disclosure at the broker level.'' [1357]

One commenter stated that, absent investor education on how to interpret Rule 605 summary reports, ''investors may misinterpret the data and make suboptimal decisions as a result.'' [1358] The amended rule does not preclude larger broker-dealers from disclosing additional information concerning their order execution practices that they believe would provide useful context concerning the quality of their services on their websites or through other means of communication.[1359] For example, individual broker-dealers can provide their own educational resources directly to their customers and other market participants. The commenter also referenced a statement from the Commission in the Proposing Release that ''differences in certain statistics for broker-dealers as compared to market centers may be more reflective of differences in business models rather than effectiveness in achieving execution quality for covered orders because of differences in order handling practices,'' and disagreed with the Commission that ''differences are well-known and are taken into account by market participants when evaluating execution quality statistics.'' [1360] These statements from the Commission in the Proposing Release were made in specific reference to market participants' use of Rule 605 reports to make a hypothetical comparison between a market center and a broker-dealer, and not to their ability to compare broker-dealers with one another. Notwithstanding the commenter's interpretation of the Commission's statements in the Proposing Release, the Commission agrees with the commenter that differences between broker-dealer business models may not be ex ante well-known to market participants. However, for the reasons described above, market participants will be able to use the information in Rule 605 reports and the Rule 605 summary reports to account for differences in broker-dealer order flow, and broker-dealers are not precluded from separately providing their customers with information that can be used to contextualize the information in the Rule 605 reports.

Meanwhile, it is unlikely that market participants will use information in Rule 605 reports to compare broker-dealers to market centers. Information about the execution quality of these two types of reporting entities is useful to different market participants for fundamentally different purposes. In terms of the principal-agent relationship described in the Market Failure section,[1361] information about execution quality for broker-dealers will be used to address different information asymmetries than information about execution quality for market centers. Broker-dealers' Rule 605 reports will be most likely used by broker-dealers' customers to compare execution quality across broker-dealers to address information asymmetries that exists between broker-dealers and their customers. In contrast, market centers' Rule 605 reports will continue to be more useful for broker-dealers to compare execution quality across market centers to address the information asymmetries that exist between broker-dealers and the market centers to which they route their customers' orders.

(2) Specifying and Expanding Requirements for Market Centers

In addition to expanding the scope of Rule 605 reporting entities to include larger broker-dealers, these amendments promote greater transparency by specifying that broker-dealers post separate Rule 605 reports for their ATSs [1362] and requiring that market centers operating SDPs post separate reports for each market center.[1363] By requiring firms that operate multiple market centers to report separately for each market center, the final rule will prohibit the commingling of multiple reporting entities' information, which, to the extent that it occurred prior to the final rule, may have added noise to or skewed Rule 605 reports. For example, requiring market centers that operate SDPs to report statistics separately for each line of business will increase the transparency of the operating market centers' fill rates, by eliminating downward skew associated with the inclusion of ''pinging'' orders submitted to the SDP.[1364] Reducing the skew of Rule 605 statistics will allow market participants to better assess differences in execution quality across different types of market centers, helping to enhance market centers' incentive to compete on the basis of execution quality to attract orders.

One commenter stated that ''certain Rule 605 metrics,'' such as fill rates, ''may be unduly impacted by differences in SDP business models,'' such as whether they send out indications of interest or solely receive IOCs.[1365] First, as amended, Rule 605 reports will add an IOC order type category,[1366] which will allow market participants to differentiate between SDPs that receive more or fewer IOCs, which should address the commenter's specific concern. More generally, and as stated by another commenter, users of SDPs tend to be sophisticated entities.[1367] As a result, it is likely that users of SDPs are knowledgeable about the differences in various SDP business models and the relationship of those differences to variations in execution quality statistics across SDPs. Lastly, the commenter's statement that there may be systematic differences between some SDP business models also applies to

[1355] *See* Virtu Letter II at 57.

[1356] *See supra* note 1064 and corresponding text for a discussion.

[1357] *See* Huang et al. Letter at 1 (attaching Xing Huang, Philippe Jorion, Jeongmin Lee & Christopher Schwarz, *Who Is Minding the Store? Order Routing and Competition in Retail Trade Execution* (Nov. 19, 2023)).

[1358] *See* SIFMA Letter II at 30.

[1359] *See supra* note 137 and corresponding text for further discussion.

[1360] *See* SIFMA Letter II at 29–30, *citing* the Proposing Release, 88 FR 3786 at 3800 (Jan. 20, 2023); *see also* Schwab Letter at 34, referencing the same statement in the Proposing Release to support its statement that, ''[i]f differences in E/Q are a result of different business models employed across firms rather than actual differences in E/Q among comparable business models, providing this information in a way that appears to be—but is not—an apples-to-apples comparison would create investor confusion rather than provide useful information on which to base decisions.''

[1361] *See supra* section IX.B.

[1362] *See* final 17 CFR 242.605(a)(1).

[1363] *See id.; see also supra* section II.C.

[1364] *See supra* section IX.C.3.a)(2) for a discussion of why the commingling of wholesaler and SDP orders for the purposes of Rule 605 reporting prior to these amendments would have effected a downward skew on the fill rates derived from the wholesalers' Rule 605 reports.

[1365] *See* Rule 605 Citadel Letter at 7.

[1366] *See supra* section III.B.2.(c)(2).

[1367] *See* Virtu Letter II at 12.

systematic differences between SDPs and market centers with other business models, and the relationship between these business models and execution quality is obscured to the extent that the execution quality information from these different execution venues is commingled. Requiring separate reporting for SDPs will provide market participants with transparency regarding the relationship between SDP business models and execution quality.

Another commenter stated that, because ''users of SDPs are all sophisticated entities capable of carrying out their own execution quality measurements and, in fact, do carry out these measurements on their own,'' requiring separate reporting ''imposes an additional cost on SDPs without any clear benefit.'' [1368] As stated in the Market Failure section, even for those market participants that have access to alternative sources of information about the execution quality of their orders, this information is typically highly individualized and nonpublic, and thus cannot be used to evaluate the execution quality of market centers with which the market participants do not do business.[1369] Furthermore, as stated in the Proposing Release, in addition to allowing users of SDPs to separately view the execution quality of SDPs, requiring wholesalers to report their SDP executions separate from their other executions will benefit the non-SDP user customers, the majority of which are individual investors.[1370]

(b) Modifications to Rule 605 Disclosure Requirements

As a result of the amendments expanding and modernizing Rule 605 disclosure requirements, the metrics used for the required Rule 605 disclosures will be more informative about execution quality, which will increase transparency into the differences in execution quality achieved by reporting entities. This increase in informativeness and transparency will enhance the benefits of expanding the scope of reporting entities, including the expansion to larger broker-dealers.[1371] In addition, as a result of the increase in transparency with respect to market center execution quality, broker-dealers will have the opportunity to be better informed when making their routing decisions. The flow of orders to those market centers that provide better execution quality will improve the execution quality of those broker-dealers (and their customers) that route their orders to these higher-quality market centers, and is expected to also increase the extent to which market centers must improve their execution practices in order to better compete with other market centers to attract customer order flow.[1372] Execution quality is expected to improve as a result.

These benefits will stem from modifications aimed at clarifying and expanding the scope of Rule 605 reporting entities, modernizing the information required to be reported under Rule 605 and improving the accessibility of the information contained in Rule 605 reports.

(1) Expanding the Definition of Covered Orders

The amendments expanding the definition of ''covered order'' to include additional order types will increase transparency about the execution quality that reporting entities achieve for these additional order types, including orders submitted with stop prices, non-exempt short sale orders, and orders submitted outside of regular trading hours.

(a) Orders Submitted Pre-Opening/Post-Closing

First, the adopted amendment expanding the definition of ''covered order'' to include NMLOs submitted outside of regular trading hours that become executable during regular trading hours[1373] will lead to a more complete picture of reporting entities' execution characteristics. While an analysis using CAT data shows that pre-open/post-close orders that are executable during regular hours are likely only a small portion of total order flow, these orders represent a relatively higher percentage of order flow associated with individual customer accounts.[1374] Individual investors will be able to make more informed decisions when choosing a broker-dealer, if these orders are included in broker-dealers' execution quality disclosures. Likewise, broker-dealers will be able to make more informed decisions about where to route NMLOs submitted outside of regular trading hours, knowing that these orders are being factored into a market center's overall statistics.

While several commenters supported the inclusion of NMLOs submitted outside of regular trading hours into Rule 605 reports,[1375] one commenter stated that the inclusion of these orders would ''likely skew the statistics''[1376] and ''lead to difficult comparisons between brokers'' because ''the first quote after opening is wide and not representative of the quote when the primary exchange opens.'' [1377] The commenter's specific concern will be addressed by the adopted amendment specifying that orders that are received during regular market hours but execute before the primary listing market has disseminated its first firm, uncrossed quotations will be treated in the same manner as any other order received pre-open or post-close.[1378] More generally, while some NMLOs submitted outside of market hours likely have characteristics that differ from those submitted during regular hours,[1379] these NMLOs make up only a very small percentage of order volume, representing only around 1.3% of total submitted share volume.[1380] Therefore, it is unlikely that the inclusion of these orders along with other order types will significantly skew execution quality statistics.

(b) Orders Submitted With Stop Prices

Second, the adopted amendment removing the exclusion of orders with

[1368] *See* Virtu Letter II at 12–13.

[1369] *See supra* note 1094 and corresponding text.

[1370] *See* Proposing Release, 88 FR 3786 at 3864 (Jan. 20, 2023).

[1371] *See supra* section IX.D.1.a) for a discussion of the benefits of expanding the scope of reporting entities under these amendments.

[1372] The magnitude of the improvements in execution practices may be lower when the MDI Rules are implemented, because the availability of faster consolidated market data with more data on odd-lot information and depth of book information from competing consolidators could result in more informed customer order routing by broker-dealers that switch to consuming the expanded consolidated market data, which could separately increase the flow of orders to trading venues offering better execution quality. *See supra* section IX.C.1.c)(2) for further discussion. However, these amendments are expected to lead to improvements in execution practices over and above the improvements that might result from the implementation of the MDI Rules.

[1373] *See* final 17 CFR 242.600(b)(27); *see also supra* section III.A.1.b).

[1374] *See* analysis described in *supra* section IX.C.3.b(4).

[1375] *See, e.g.,* Nasdaq Letter at 43–44; Virtu Letter II at 5.

[1376] *See* Schwab Letter at 32.

[1377] *See* Schwab Letter II at 7.

[1378] *See* discussion in *supra* section III.A.1.b). Specifically, any order that executes during this intervening time period will be excluded from Rule 605 reports; any NMLO (including an order submitted with a stop price) will not be considered executable until after the first firm, uncrossed quotations in the security are disseminated by the primary listing market; and any determination of whether a limit order received prior to or during that period is a marketable limit order, a beyond-the-midpoint limit order, or an NMLO will not occur until after the first firm, uncrossed quotations in the security are disseminated by the primary listing market.

[1379] For example, an analysis of the sample of CAT data described in note 1182 *supra* showed that pre-open executable NMLOs have somewhat lower fill rates than the full sample of executable NMLOs (0.18% vs. 0.42%).

[1380] *See supra* note 1182 and corresponding text for more information about this analysis.

stop prices from the definition of ''covered order'' [1381] will increase transparency about the execution quality of this type of order.[1382] This will be particularly beneficial, as the handling of stop orders can vary significantly across broker-dealers and across the market centers to which they route, and the execution prices of stop orders are highly sensitive to handling and execution practices.[1383] As broker-dealers will be incentivized to improve their handling of stop orders, they will be able to use information about the execution quality of stop orders achieved by market centers to route stop orders to those market centers with the practices and abilities that allow them to achieve higher execution quality for these orders.[1384]

The amendment to include stop orders within separate order type categories rather than grouping them together with other order types [1385] also will prohibit them from skewing the execution quality of other orders downwards, since stop orders are more likely to execute in adverse market conditions.[1386] In addition, including separate categories for executable market orders submitted with stop prices, executable stop marketable limit orders, and executable stop NMLOs will help market participants distinguish between orders with different execution profiles. For example, the risk of large losses is particularly acute for stop orders that use market orders, which represent the majority of stop orders submitted by individual investors according to Table 3, as the execution price an investor receives for this market order can deviate significantly from the stop price in a fast-moving market where prices change rapidly.[1387] As a result, the execution quality of these orders is highly sensitive to handling and execution practices, such that market participants will benefit from transparency regarding reporting entities' handling of these orders.

One commenter stated that the inclusion of stop orders ''will create increased complexity with little benefit for the individual investor,'' and that therefore ''the Commission should consider excluding stop orders from the report entirely.'' [1388] The Commission disagrees that there will be little benefit for individual investors from the inclusion of stop orders in Rule 605 reports. As shown in Table 3, individual account holders are more likely than institutional account holders to submit stop orders (*i.e.,* 4.91% of individual account holders' market orders are submitted with stop prices vs. 0.25% of those of institutional account holders). Therefore, information about the execution quality of stop orders will be particularly useful for individual investors, who can use this information to identify and direct stop orders to those broker-dealers with the practices and abilities that allow them to achieve higher execution quality for these orders. Such information is especially useful given that stop orders are more likely to execute in adverse market conditions.

(c) Non-Exempt Short Sale Orders

The Commission is adopting its position that non-exempt short sales orders will not be considered special handling orders unless a price test restriction is in effect for the security.[1389] This will lead to a more complete picture of reporting entities' execution characteristics, as short sales make up a large portion of trades and by implication are likely also a significant component of order flow.[1390] An analysis of short volume data found that, between Aug. 2009 and Mar. 2023, short selling was an average of 39.6% of trading volume for non-financial common stocks.[1391] To the extent that the proportion of short selling trade volume is comparable to the proportion of short selling order volume, these data points show that short selling is prevalent in equity markets. Therefore, the inclusion of non-exempt short sale orders will result in reporting entities' execution quality statistics reflecting more relevant orders for individual and institutional investors, who both engage in short selling. While the costs to maintain margin accounts and borrow stocks may prevent some individual investors from participating in the short sale market, one academic working paper found that, between January 2010 and December 2016, 6.36% of all off-exchange short selling [1392] could be attributed to retail traders, and 10.92% of retail trading was made up of short sales.[1393] Meanwhile, evidence suggests

[1381] *See* final 17 CFR 242.600(b)(27) (eliminating the express carve out of orders submitted with stop prices from the definition of ''covered order''); *see also supra* section III.A.2.(b).

[1382] Several commenters generally agreed that the inclusion of information about stop orders in Rule 605 reports will make the data more useful and complete. *See, e.g.,* Nasdaq Letter at 44; Virtu Letter II at 5; and SIFMA AMG Letter at 6.

[1383] *See supra* note 1158 and accompanying text for a discussion of differential treatment of stop orders.

[1384] As discussed in *supra* section IX.C.3.(b)(2), the Commission understands that the handling of stop orders can vary significantly across market centers.

[1385] *See* final 17 CFR 242.600(b)(19) (defining ''categorized by order type'' to include a category for ''*executable* orders submitted with stop prices'') (emphasis added); *see also* discussion in *supra* section III.A.2.(b).

[1386] *See supra* note 1159 and corresponding text for further discussion.

[1387] *See, e.g., SEC Investor Bulletin: Stop, Stop-Limit, and Trailing Stop Orders* (July 13, 2017), *available at https://www.sec.gov/oiea/investor-alerts-bulletins/ib_stoporders.html.* This risk can be attenuated with the use of stop limit orders, which sets a minimum price at which the stop order can be executed. However, the limit price may prevent the stop limit order from executing if the stock price falls below the limit price before the stop limit order can execute.

[1388] *See* Schwab Letter II at 5.

[1389] *See supra* section III.A.3.(b).

[1390] Several commenters supported including short sales in Rule 605 reports. *See, e.g.,* Nasdaq Letter at 43; Virtu Letter II at 5.

[1391] Short volume data are collected from CBOE Group (CBOE BYX Exchange, CBOE BZX Exchange, CBOE EDGA Exchange, CBOE EDGX Exchange), FINRA (FNYX, FNSQ, FNQC), NASDAQ Group (Nasdaq BX, Nasdaq PSX and Nasdaq Stock Market), and NYSE Group (New York Stock Exchange, NYSE Arca, NYSE American, NYSE Chicago, and NYSE National). *See https://www.cboe.com/us/equities/market_statistics/short_sale/* (last visited Apr. 2023) (CBOE data, which became available for purchase at *https://datashop.cboe.com/us-equity-short-volume-and-trades* on June 1, 2023); *https://www.finra.org/finra-data/browse-catalog/short-sale-volume-data* (FINRA data); *https://nasdaqtrader.com/Trader.aspx?id=shortsale* (NASDAQ data); *ftp://ftp.nyxdata.com/* (NYSE data). Common stocks include those with a CRSP share code of 10 or 11. Financial stocks (SIC code 6000–6999) and stocks that do not have an active trading status in CRSP (trade status = A) are excluded. CRSP share codes, SIC codes, trading statuses, and daily trading volumes are derived based on data from CRSP 1925 U.S. Stock Database, Ctr. Rsch. Sec. Prices, U. Chi. Booth Sch. Bus. (2023). The daily level of short selling is calculated for each stock as the daily number of shares sold short divided by the daily trading volume, averaged across stocks, and finally averaged across all days in the sample (Aug. 3, 2009 to Mar. 31, 2023). This number matches that of other studies. For example, Figure F.1 in the Congressional Study on Short Sale Reporting shows that the level of short selling as a percentage of trading volume grew from 2007 to close to 50% by 2013. *See Short Sale Position and Transaction Reporting* (June 5, 2014), *available at https://www.sec.gov/files/short-sale-position-and-transaction-reporting%2C0.pdf.* The Proposing Release stated that short selling was an average of 47.3% of trading volume for non-financial common stocks between Aug. 2009 and Feb. 2021. *See* Proposing Release, 88 FR 3786 at 3806 (Jan. 20, 2023). This is higher than the estimate above partially because, while the analysis in the Proposing Release included in the denominator only trading volume of those trading venues from which the Commission collected short volume data, the analysis above includes in the denominator all trading volume from CRSP in order to provide a more conservative estimate of short selling volume. Regardless of the methodology, both numbers reflect that short sales are a significant percentage of total trading volume.

[1392] One academic paper found that short selling by individual investors made up a much smaller percentage of overall shorting volume on NYSE (1% to 2%). The authors attribute the low number of on-exchange retail shorting to brokerage routing decisions. *See* Ekkehart Boehmer et al., *Which Shorts are Informed?,* 63 J. Fin. 491 (2008).

[1393] *See* Ekkehart Boehmer & Wanshan Song, *Smart Retail Traders, Short Sellers, and Stock Returns* (working paper Oct. 23, 2020) *available at https://papers.ssrn.com/sol3/papers.cfm?*

Continued

that short selling by institutional investors is largely the purview of hedge funds,[1394] which are estimated to make up around 85% of the short selling market.[1395] One academic paper finds that short sellers' choice of trading venue is highly dependent on its market design and that short sellers prefer trading venues that offer high execution speeds over those that offer low trading costs.[1396] Another academic study shows that wholesalers frequently offer price improvement to short sales and that including short sales in estimates of price improvement increases the total dollar value of net price improvement provided by more than 6%.[1397] Therefore, including information about the execution quality that reporting entities achieve for non-exempt short sale orders into Rule 605 disclosures will be relevant for a variety of investors who engage in short selling.

(2) Modernizing the Required Information

(a) Categorization by Order Size and Type

By enabling investors to make better apples-to-apples comparisons across reporting entities with potentially different order flow,[1398] the amendments expanding and modernizing order size and order type categories are expected to enhance competition among reporting entities on the basis of execution quality, resulting in improvements in execution quality for investors.[1399] Furthermore, for a specific order size or type, as order flow accumulates to the reporting entities offering the highest execution quality for these sizes and types of orders, this will in turn translate into improved execution quality for investors who have orders of these sizes and use these types of orders. For example, as a result of the adopted amendment expanding the order size categories to include information about odd-lots, market participants will have improved access to information about a market center's offering of price improvement and timely execution of odd-lots. The expected improvement in both the price and speed at which odd-lot orders are executed will benefit for both institutional and individual investors.[1400]

(i) Order Size Categories

The amendments modernizing the order size categories are expected to make Rule 605 reports more relevant by showing more meaningful differentiation in execution quality across different order sizes. This will allow consumers of Rule 605 reports to control for potential differences in order sizes across different reporting entities, while also increasing the extent to which reporting entities compete on the basis of execution quality across order sizes.

First, the amendments defining order size categories in terms of notional values[1401] will increase transparency regarding distribution of order sizes that a reporting entity handles, particularly for higher-priced stocks.[1402] Continuing the example from section IX.C.3.b)(1)(a), for a $500 stock, all orders for $100,000 (*i.e.,* 200 shares) or less will no longer be grouped into a single order size category (100 to 499 shares[1403]) or, if they are for less than 100 shares, excluded altogether from reporting requirements.[1404] Instead, these orders will be distributed across a number of order size buckets.[1405] To include larger-sized orders into Rule 605 reporting requirements while remaining consistent with Regulation NMS rules that exclude orders or trades that are sized above $200,000,[1406] these orders will be grouped into a separate category. This will facilitate market participants' ability to use these categories to compare across orders of different sizes in higher-priced stocks, while controlling for potential differences in the treatment of larger-sized orders. As a result, market participants will be better able to take into account potential differences in the distribution of order sizes that reporting entities typically handle for a given stock when comparing execution quality metrics across reporting entities, making these metrics more informative for making apples-to-apples comparisons of execution quality across reporting entities.

Figure 16 shows the distribution of orders across the adopted notional size buckets for stocks with different price levels, using a sample of CAT data for 400 stocks for Q1 2023.[1407] The results show that while, as expected, orders for lower-priced stocks tend to cluster in the smaller size buckets and orders for higher-priced stocks tend to cluster in the larger size buckets, in aggregate order flow appears reasonably well-distributed across the various order size buckets. Two exceptions are the smallest size bucket (orders for less than $250) and the largest size bucket (orders for $200,000 or more), both of which have little order flow. However, while there is relatively little order flow associated with the smallest notional size bucket (orders for less than $250),

abstract_id=3723096 (retrieved from SSRN Elsevier database).

[1394] *See* Peter Molk & Frank Partnoy, *Institutional Investors as Short Sellers?,* 99 B.U. L. Rev. 837, 839 (2019). Molk and Partnoy's paper ''identif[ies] the regulatory and other barriers that keep key categories of institutions[, specifically, mutual funds, insurance companies, banks, sovereign wealth funds, endowments, and foundations,] from acquiring significant short positions.'' *Id.* at 843. In addition, a Division of Economic and Risk Analysis White Paper survey of all mutual fund Form N–SAR filings in 2014 found that ''[w]hile 64% of all funds were allowed to engage in short selling, only 5% of all funds actually did so.'' Daniel Deli et al., *Use Of Derivatives By Registered Investment Companies,* SEC (2015), *available at https://www.sec.gov/files/derivatives12-2015.pdf.*

[1395] *See* Yawen Jiao et al., *Short Selling Meets Hedge Fund 13F: An Anatomy of Informed Demand,* 122 J. Fin. Econ. 544 (2016) (*citing* a 2009 report from Goldman Sachs).

[1396] *See* Adam V. Reed et al., *Shorting in Broad Daylight: Short Sales and Venue Choice,* 55 J. Fin. Quantitative Analysis 2246 (Nov. 2020).

[1397] *See* Battalio & Jennings, *supra* note 1253.

[1398] *See supra* note 984 for an example of how differences in order flow characteristics may impact inferences about execution quality.

[1399] The importance of being able to make apples-to-apples comparisons of execution quality in Rule 605 reports was referenced by some commenters. *See, e.g.,* SIFMA Letter II at 30, stating that ''Rule 605 data can present differently among firms with different customer bases and correspondingly different types of order flow,'' and Schwab Letter at 35, stating that ''providing [E/Q] information in a way that appears to be—but is not—an apples-to-apples comparison would create investor confusion rather than provide useful information on which to base decisions.''

[1400] *See supra* section IX.C.3.(b)(1)(a) for a discussion of the use of odd-lots by both individual and institutional investors.

[1401] *See* final 17 CFR 242.600(b)(18).

[1402] Several commenters agreed that a change from order size buckets defined in terms of share counts to notional order size buckets would be beneficial. *See, e.g.,* Fidelity Letter at 9; Rule 605 Citadel Letter at 6; Schwab Letter at 33; Nasdaq Letter at 45–46; and Angel Letter at 2. Many of these commenters compared the benefits of notional order size buckets to those of order size buckets defined in terms of number of round lots, as was proposed. *See infra* section IX.E.3.a)(1) for a discussion of these comments in the context of the Commission's consideration of a reasonable alternative that would define order size buckets in terms of number of round lots.

[1403] *See* prior 17 CFR 242.605(a)(1); *see also supra* note 1121 and corresponding text for a definition of the order size categories included in prior Rule 605 reporting requirements.

[1404] In addition, even prior to the implementation of the MDI Rules, a small number of NMS stocks have a round lot size smaller than 100. *See supra* note 1191.

[1405] These order size categories include (i) less than $250; (ii) $250 to less than $1,000; (iii) $1,000 to less than $5,000; (iv) $5,000 to less than $10,000; (v) $10,000 to less than $20,000; (vi) $20,000 to less than $50,000; and (vii) $50,000 to less than $200,000. An additional order size category includes orders for (viii) $200,000 or more. The order size categories provide additional differentiation for orders of less than a share, odd-lot orders, and orders of at least a round lot.

[1406] *See, e.g.,* the examples discussed in *supra* note 1187.

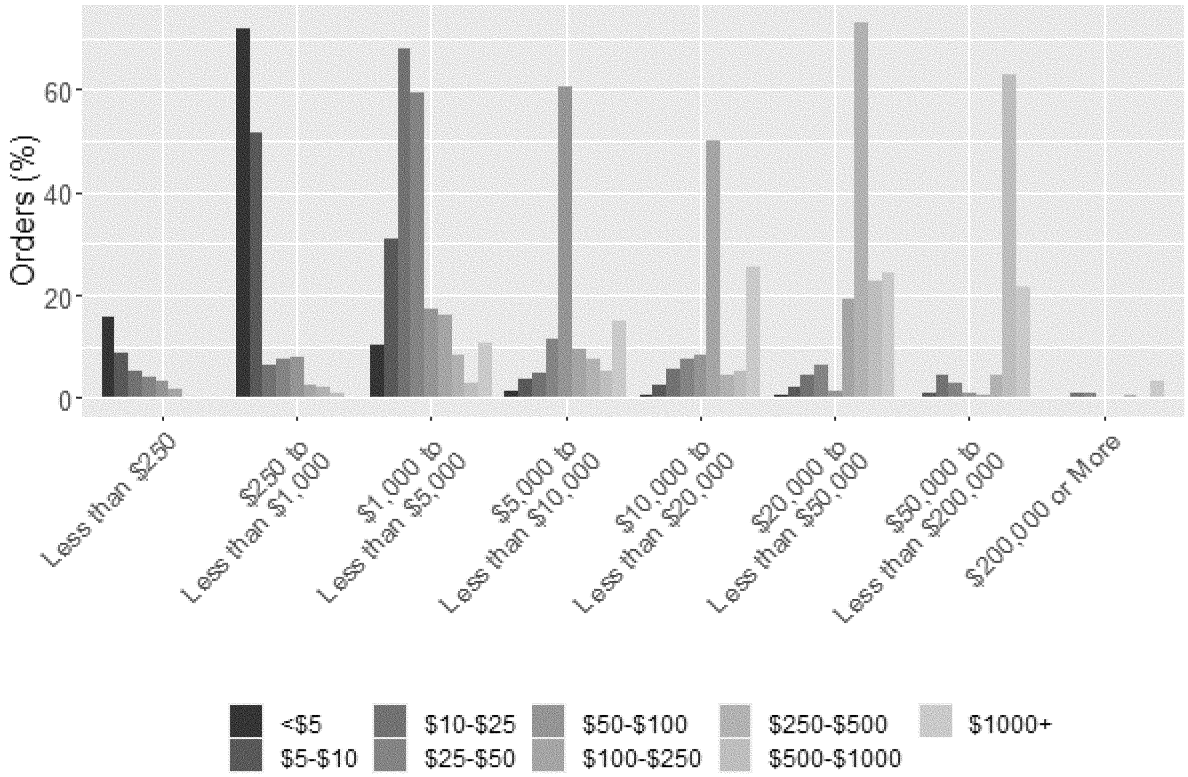
[1407] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1211 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. *See supra* section IX.C.1.c)(2).

a further look at the data shows that a large portion of these orders are likely associated with individual investors.

Figure 17 shows the distribution across the notional order size buckets of orders associated with individual customer accounts as compared to those from institutional customer accounts,[1408] and shows that nearly 14.9% of orders from individual customer accounts are for less than $250. Therefore, including a separate order size category for these small-sized orders will be particularly beneficial for individual investors. Meanwhile, for the largest order size bucket, grouping these orders together and separately from other orders is consistent with Regulation NMS rules that exclude block orders or trades, which may result in different execution profiles for these orders.[1409] Furthermore, while these orders make up a small percentage of orders, they make up a significant percentage of share volume.[1410]

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Figure 16: Distribution of Orders Across Notional Order Size Buckets for Different Stock Price Groups, Q1 2023



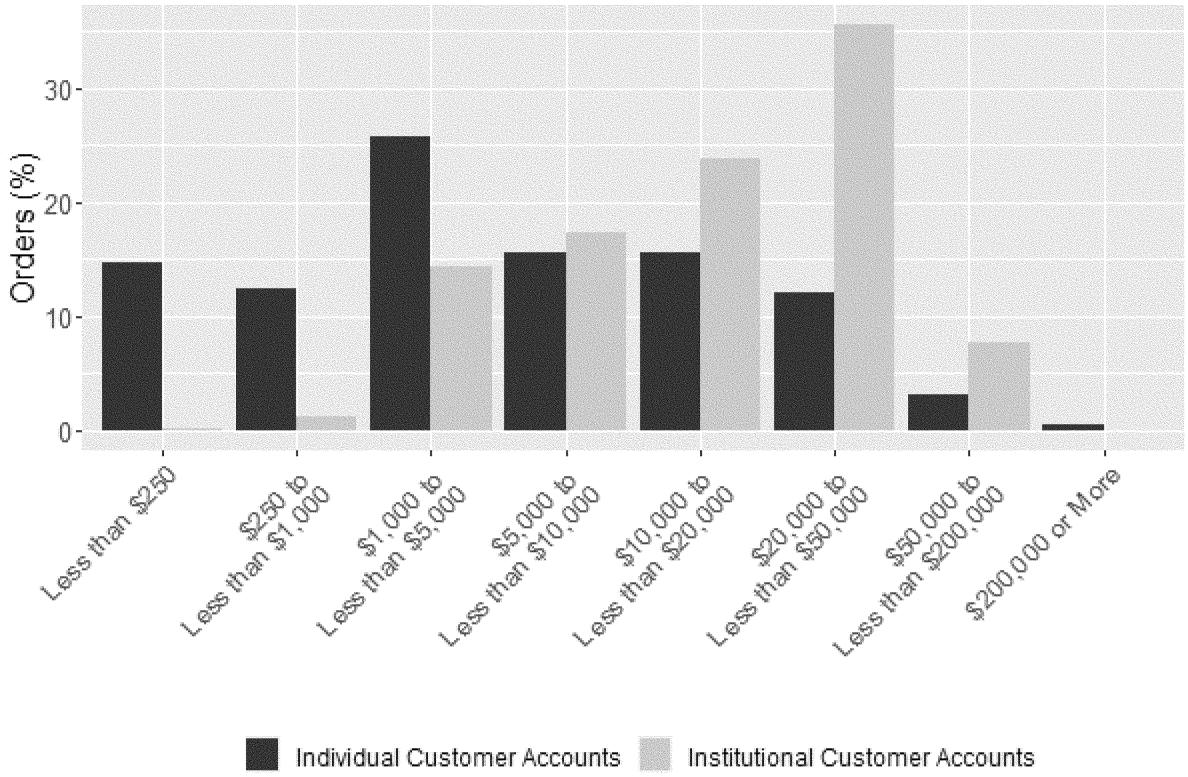
This figure shows the distribution of orders across notional order size buckets for different stock price groups. Percentages are calculated as the number of orders in a given order size bucket across all stocks within a given stock price group, summed across all days in the sample, divided by the total number of orders within a stock price group, summed across all days in the sample. The analysis uses a sample of CAT data for 400 stocks. See supra note 1211 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers reported may be different following the implementation of the MDI Rules. See supra note 1407 and section IX.C.1.c)(2).

[1408] *See supra* note 1144 for a definition of account types in CAT.

[1409] *See supra* note 1187 for examples.

[1410] Specifically, an analysis of the CAT data in *supra* note 1211 finds that orders priced $200,000 or higher make up 18.0% of order flow in terms of share volume.

Figure 17: Distribution of Orders Across Notional Order Size Buckets for Different Customer Account Types, Q1 2023



This figure shows the distribution of orders across notional order size buckets for different stock price groups. Percentages are calculated as the number of orders in a given order size bucket that originated from a given account type, summed across all stocks and days in the sample, divided by the total number of orders originating from a given account type, summed across all days in the sample. The analysis uses a sample of CAT data for 400 stocks. See supra note 1211 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers reported may be different following the implementation of the MDI Rules. See supra note 1407 and section IX.C.1.c)(2).

Second, as a result of the new order size categories, amended Rule 605 reports will contain information about some orders that were missing from preexisting Rule 605 reports, including orders less than a share, orders less than 100 shares, and larger-sized orders of 10,000 or more shares.[1411] The new order size categories will also help ensure that round lots for stocks with prices greater than $250 are not excluded from Rule 605 reports following the implementation of the MDI Rules.[1412] Analyses showed that the inclusion of odd-lot orders into Rule 605 reporting requirements will include up to an additional 16.9% of NMLOs (0.99% of NMLO share volume),[1413] and the inclusion of fractional shares will include up to an additional 16.4% of executions received by individual investors into Rule 605 reports.[1414] In addition, expanding Rule 605 coverage to include larger-sized orders [1415] will include up to an additional 30% of NMLO share volume,[1416] which will likely mostly be relevant for institutional investors, to the extent that some of these orders may not be split into smaller child orders.[1417] Including these order sizes within the scope of Rule 605 will help ensure that market participants are able to compare the execution quality of these orders across reporting entities,[1418] which will encourage reporting entities to compete for these orders on the basis of execution quality.

[1411] Because final Rule 605 reports will not define order size buckets in terms of share numbers, these orders will be distributed across the notional order size buckets described in note 1405 *supra,* according to their respective notional values.

[1412] *See supra* note 1190–1191 and corresponding text for further discussion.

[1413] *See* Figure 6, in *supra* section IX.C.3.b)(1)(a). As discussed in this section, odd-lots are submitted by both individual and institutional investors.

[1414] *See* analysis in *supra* section IX.C.3.b)(1)(b).

[1415] *See* final 17 CFR 242.600(b)(18). Furthermore, *see supra* section III.B.1.b) for a discussion of the Commission's decision to rescind the exemptive relief for orders of 10,000 or more shares and include these orders within the scope of Rule 605 reports.

[1416] *See* analysis in *supra* section IX.C.3.b)(1)(c).

[1417] The benefits of including larger-sized orders may be limited if most large institutional orders are not held orders and will thus be excluded from Rule 605 reporting requirements, and/or are broken up into smaller child orders that are likely to be smaller and have already been included in Rule 605 reporting requirements prior to these amendments. *See supra* sections IX.C.1.b) and IX.C.4.a)(1)(b).

[1418] For example, one academic study found that odd-lot orders often receive price improvement from wholesalers, and that incorporating information about price improvement received by odd-lots would increase dollar estimates of price improvement by 9.6%, even after adjusting the NBBO to incorporate the best displayed price. *See* Battalio & Jennings, *supra* note 1253, at 17.

Commenters generally supported the inclusion of odd-lots,[1419] fractional shares,[1420] and larger-sized orders [1421] into Rule 605 reporting requirements. However, one commenter did not support the inclusion of fractional shares, stating that, ''[g]iven the de minimis quantity of shares . . . this information is of limited value to investors.'' [1422] While the Commission agrees that, as a percentage of shares, fractional shares represent a small part of order flow,[1423] it disagrees that this means that information about these orders is of limited value to investors. Fractional orders less than a share represent a relatively high percentage (16.4%) of executions received by individual account holders in terms of number of trades.[1424] Furthermore, the execution quality received by fractional orders less than a share may be very different from that of full-share orders, which increases the relevance of execution quality metrics for these types of orders.[1425] Another commenter suggested that notional order size buckets be ''capped at block size'' so as to ''ensur[e] that statistics cover most retail trades.'' [1426] As discussed in the Baseline, while institutional investors likely have alternative sources of information about the execution quality of their orders, Rule 605 reports are likely still useful for institutional investors, for example, to assess the execution quality of the broker-dealers with which they do not currently do business, or to assess the execution quality of market centers to which their broker-dealers do not currently route orders.[1427] Therefore, information about larger-sized orders will be useful for consumers of Rule 605 reports.

Third, to further facilitate the comparison of execution quality across similar orders, these amendments will require information within each notional order size category to be separated according to whether the orders were odd-lots, round-lots, or fractional orders less than one share. Requiring information to be reported separately for round-lot orders and odd-lot orders within each notional order size category addresses a potential issue with notional order size buckets, namely, that while such categories remain in the spirit of distinguishing between ''small'' and ''large'' orders, they no longer produce a meaningful distinction between orders that may or may not be at quotes protected under Rule 611.[1428] Figure 18 shows the distribution of round lots and odd-lots across the notional order size buckets using the sample of CAT data described above.[1429] As expected, odd-lots tend to be clustered in the smaller notional size buckets, while round lots are clustered in the larger size buckets. However, the results show that most notional buckets will contain a mix of both round-lot and odd-lot orders, which supports the benefit of including separate information for each lot type within each notional size bucket.[1430]

[1419] *See, e.g.,* SIFMA Letter at 25; SIFMA AMG Letter at 6; and Nasdaq Letter at 44.

[1420] *See, e.g.,* Professor Schwarz et al. Letter at 4.

[1421] *See, e.g.,* Virtu Letter II at 9.

[1422] *See* SIFMA Letter at 31.

[1423] *See supra* note 1145, showing that executed fractional orders for less than one share made up about 0.001% of total executed share volume.

[1424] *See supra* note 1145 and corresponding text.

[1425] *See, e.g., infra* note 1434 and corresponding text for evidence of differences in execution quality for fractional orders less than a share.

[1426] *See* Nasdaq Letter at 44. This commenter also suggested increasing the block size threshold to $400,000.

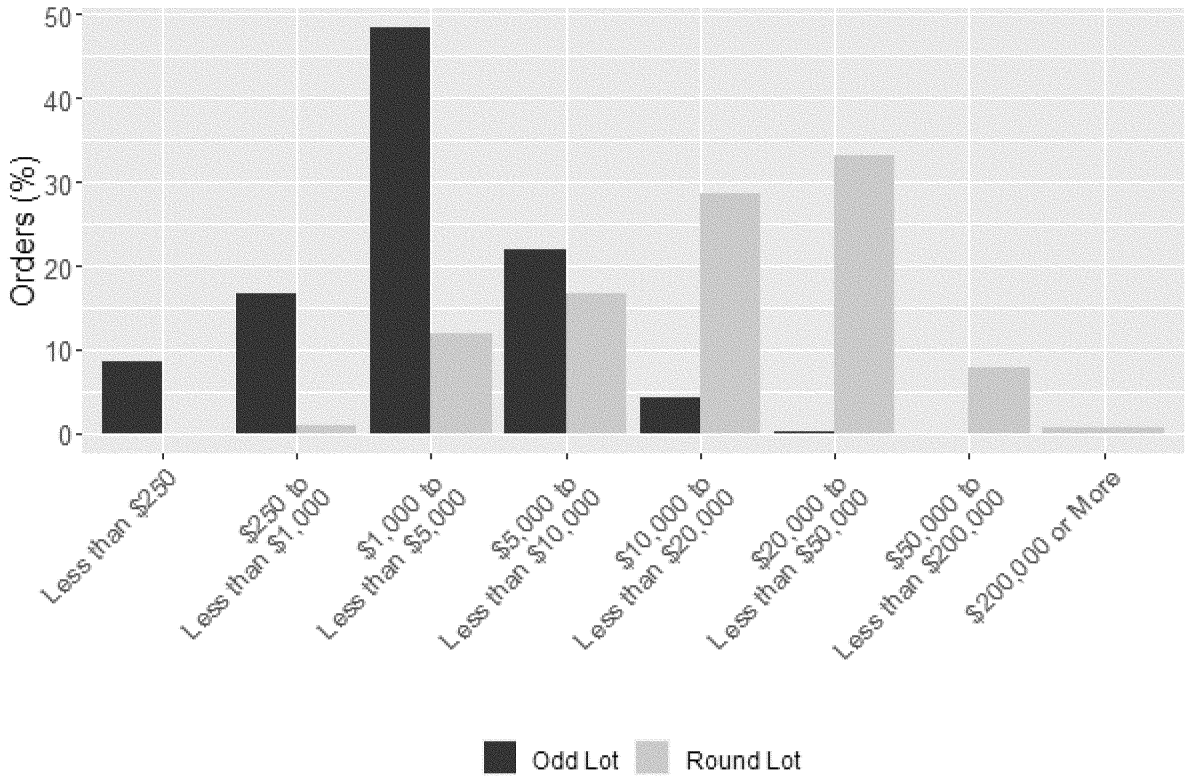
[1427] *See supra* section IX.C.2.c) for a discussion of the current usage of Rule 605 reports by institutional investors.

[1428] This issue was discussed as one of the potential disadvantages of using notional order size buckets in the Proposing Release. *See* Proposing Release, 88 FR 3786 at 3891 (Jan. 20, 2023).

[1429] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1211 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. *See supra* section IX.C.1.c)(2) and *infra* note 1430.

[1430] Within a given notional order size bucket, the distribution of orders across round-lot and odd-lot categories may change following the implementation of the MDI Rules, particularly for those stocks whose round-lot size will be reduced. *See supra* section IX.C.1.c)(2). However, the distribution of orders across notional order size buckets will not be directly affected, as the notional size of an order is irrespective of its categorization as a round-lot or odd-lot. *See also supra* note 375 for further discussion of the interaction between the round lot definition under MDI and the order size categories under these amendments.

Figure 18: Distribution of Odd-Lot and Round Lot Orders Across Notional Order Size Buckets, Q1 2023



This figure shows the distribution of orders across notional order size buckets for odd-lots and round lots. Percentages are calculated as the number of orders in a given order size bucket for a given lot type, summed across all stocks and days in the sample, divided by the total number of orders for a given lot type, summed across all stocks and days. The analysis uses a sample of CAT data for 400 stocks. See supra note 1211 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers reported may be different following the implementation of the MDI Rules. See supra note 1407 and section IX.C.1.c)(2).

Including separate execution quality information for fractional orders less than one share will provide greater insight into an important segment of individual investor order flow.[1431] This is particularly important given that the execution quality of orders for less than one share may vary across broker-dealers, who have different ways to handle these orders, such as internalizing such orders or aggregating them together for the purpose of rerouting to market centers.[1432] It is likely that the vast majority of fractional orders for less than one share will be captured within the smallest order size bucket; however, to the extent that there is fractional volume in other order size buckets, market participants will benefit from being able to differentiate fractional volume within these buckets. An analysis of CAT data[1433] found that, while 99.7% of fractional orders for less than one share are for $250 or less, four out of the eight notional size buckets contained at least one fractional order for less than a share.

[1431] Fractional orders less than a share represent a relatively high percentage (16.4%) of executions received by individual account holders in terms of number of trades. *See supra* note 1145 and corresponding text.

[1432] *See supra* section IX.C.3.b)(1)(b) for further discussion.

[1433] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1211 for dataset description.

One commenter stated that, based on their trading experience, ''fractional market orders also receive widely different price improvement across brokers,'' and that ''full share price improvement statistics are not informative for the execution quality of our fractional trades.'' [1434] This implies that information about how well a reporting entity executes full-share orders is not necessarily useful for inferring how well that reporting entity will perform when executing a fractional order. The Commission agrees with the commenter that ''these results justify the need for fractional trades to have their own category in the Rule 605 disclosures,'' [1435] because these orders are especially likely to benefit from an increase in competition among reporting entities on the basis of execution quality.

Lastly, requiring order size categories under Rule 605 to include information about fractional orders less than one share [1436] will expand the number of reporting entities to include an estimated 20 market centers [1437] that exclusively execute fractional orders less than one share. Prior to these amendments, these market centers were not required to file Rule 605 reports due to their orders falling below the smallest order size category in preexisting Rule 605. This will increase transparency about the execution quality achieved by these market centers.[1438]

(ii) Order Type Categories

The amendments to Rule 605 modifying the order type categories required by Rule 605, including modifications to the coverage of NMLOs, and separate order type categories for marketable, midpoint-or-better, and other non-marketable IOCs, will improve the relevance of the information in Rule 605 reports regarding execution quality across different order types. This will facilitate comparisons and competition among reporting centers on the basis of execution quality for these orders.

The amendment modifying Rule 605's coverage of NMLOs so that reporting entities are required to disclose execution quality information only for those NMLOs that become executable [1439] (*i.e.,* eventually touch the NBBO) will facilitate comparisons between reporting entities, by ensuring that the execution quality statistics for NMLOs more meaningfully capture a market center's performance in handling NMLOs, rather than reflecting market conditions potentially outside of the market center's control, such as movements of the NBBO. This will be achieved because Rule 605 reports will more accurately exclude NMLOs that do not receive a meaningful opportunity to execute, for example, because the price moved away from the order and/or the order was cancelled before its limit price was reached, while including those NMLOs that investors could expect to have a reasonable chance of executing.[1440]

This is evident from an analysis comparing the fill rates of all near-the-quote and away-from-the-quote NMLOs to the fill rates of executable NMLOs, calculated using the sample of MIDAS data.[1441] Results are presented in Figure 19.[1442] While the fill rates of all near-the-quote and away-from-the-quote NMLOs are very low (0.27% and 0.02%, respectively), the fill rates of executable near-the-quote and away-from-the-quote NMLOs are much higher, and also very different from one another. In fact, at 32.5%, the average fill rate of executable away-from-the-quote NMLOs is relatively high, and actually higher than the average fill rate of executable near-the-quote orders (2.71%).[1443] This

[1434] *See* Professor Schwarz et al. Letter at 4. Specifically, the commenter found that E/Q ranged from 0.127 to 0.915 for fractional trades and ranged from 0.056 and 0.624 for full-share trades. *See* Professor Schwarz et al. Letter, Table 2. The commenter does not state whether these statistics include only fractional trades less than one share, or all trades that have fractional components.

[1435] *See* Professor Schwarz et al. Letter at 4.

[1436] *See* final 17 CFR 242.600(b)(18).

[1437] *See infra* note 1659 for further discussion of this estimate.

[1438] One commenter stated that, because much of today's market infrastructure does not yet support fractional share trading (including that ''FINRA does not currently have a mechanism to report fractional share trades''), ''the costs to fully modify [the reporting] infrastructure would be high compared to the minimal benefit of including fractional share reporting.'' SIFMA Letter at 31; *see infra* note 1673 and corresponding text for a discussion of and the Commission's response to this commenter.

[1439] *See* final 17 CFR 242.600(b)(39) (defining ''executable'') and final 17 CFR 242.600(b)(19) (defining ''categorized by order type'' to include categories for ''*executable* orders submitted with stop prices'' and ''*executable* non-marketable limit orders'') (emphasis added); *see also supra* sections III.A.2.b) and III.B.2.a)(2).

[1440] Several commenters generally supported a new requirement to report information about executable NMLOs. *See, e.g.,* Rule 605 Citadel Letter at 11; Nasdaq Letter at 44; SIFMA AMG Letter at 6; and SIFMA Letter at 25.

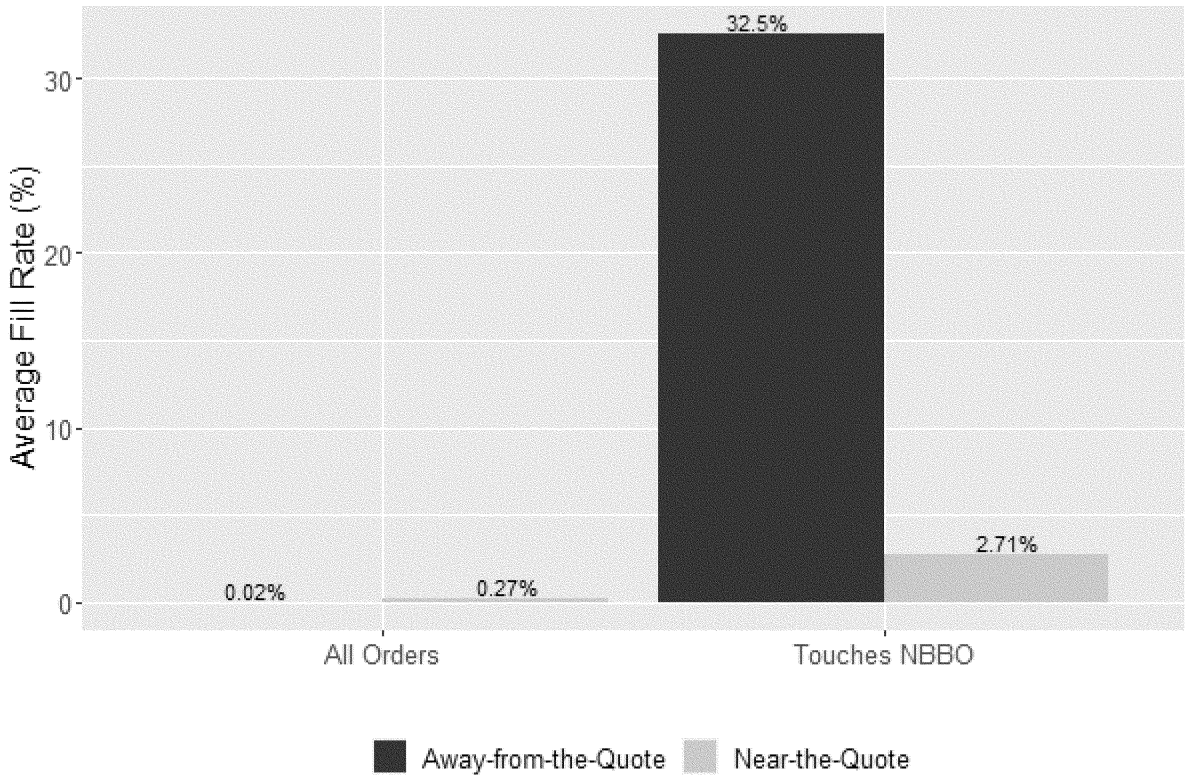
[1441] *See supra* note 1130 for a description of the dataset. The Commission found that only a small percentage of NMLOs eventually touch the NBBO: only 13.7% of near-the-quote NMLOs and 0.92% of away-from-the-quote NMLOs were executable during their lifespan. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average fill rates of these NMLO categories. *See supra* section IX.C.1.c)(2). Also, by definition, all at-the-quote and inside-the-quote NMLOs are executable because they have a limit price equal to or better than the NBBO, and so the fill rates of executable at-the-quote and inside-the-quote NMLOs would be identical to those for at-the-quote and inside-the-quote NMLOs presented in Figure 9 *supra.*

[1442] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3867 (Figure 15), 3842, n.634 (Jan. 20, 2023) (for data description). Results from Figure 19 are similar to those in Figure 15 in the Proposing Release after taking into account these updates and corrections. As discussed in *supra* note 1199, the analysis may overestimate fill rates due to the exclusion of orders with multiple submission messages. However, even in the alternative analysis without this exclusion described in *supra* note 1199, fill rates for executable away-from-the-quote NMLOs are still comparatively high, at 10.5%. While this alternative analysis, by assigning to the total submitted volume the price at the time of submission, tended to overestimate the number of executable NMLOs, it is unclear that this would systematically overestimate fill rates for executable NMLOs, as fill rates are calculated as the sum of executed shares divided by the sum of submitted shares and are thus indifferent to the distribution of shares across multiple submissions. For example, consider that a NMLO that consists of four separate submissions of 100 shares each, 100 shares of which execute, will have the same fill rate as an order for 400 shares, 100 shares of which executes (25%). Therefore, the Commission considers 10.5% to be an approximate lower bound for the fill rate of executable away-from-the-quote NMLOs. The results from both analyses show that many executable away-from-the-quote NMLOs have a meaningful opportunity to execute and many do. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that removing near-the-quote NMLOs that are not executable results in a set of NMLOs with a more meaningful opportunity to execute, and that there are benefits to including executable away-from-the-quote NMLOs and to excluding near-the-quote NMLOs that are never executable.

[1443] This is likely because executable near-the-quote NMLOs are more likely than away-from-the-quote NMLOs to be cancelled after their limit prices are reached but before they execute. This could be the case, for example, because near-the-quote orders are more likely to be submitted by market participants such as market makers, who are more likely to actively monitor their limit orders and may cancel them to adjust them for changes in the market. Examining the distribution of cancellations of these orders reveals that a higher percentage of executable near-the-quote NMLOs are cancelled within a short period of time, as compared to executable away-from-the-quote NMLOs. Specifically, 14.2% of executable near-the-quote NMLO shares are cancelled within 100 milliseconds, vs. 7.7% of executable away-from-the-quote NMLOs, and that 36.7% of executable near-the-quote NMLO shares are cancelled within 1 second, vs. 13.9% of executable away-from-the-quote NMLOs. A similar analysis in the Proposing Release looked at the distribution of the cancellations of all (*i.e.,* both executable and non-executable) away-from-the-quote and near-the-quote NMLOs, and similarly found that a larger percentage of near-the-quote NMLOs have execution times below 100 milliseconds. *See* Proposing Release, 88 FR 3786 at 3867, n.841 (Jan. 20, 2023). To the extent that near-the-quote NMLOs are submitted by traders that are more likely to cancel these orders before they are executed, this could explain why executable near-the-quote NMLOs have lower fill rates than executable away-from-the-quote NMLOs.

reflects that even away-from-the-quote orders are likely to execute if prices move in a direction such that they have a meaningful opportunity to execute. Therefore, the execution quality statistics resulting from the amendments to Rule 605 better reflect a market center's performance in handling NMLOs, by including NMLOs with a meaningful opportunity to execute and excluding NMLOs without a meaningful opportunity to execute.

Figure 19: Fill Rates of Executable Away-from-the-Quote and Near-the-Quote NMLOs, Mar. 2023



This figure plots the fill rates of away-from-the-quote and near-the-quote NMLOs, using order submission data from MIDAS. See supra note 1130 for a description of the dataset. Fill rates are calculated as the number of shares executed of a given order type, summed across all stocks and days in the sample, as a percentage of the number of shares submitted of a given order type, summed across all stocks and days. Plotted are the fill rates for all away-from-the-quote and near-the-quote NMLOs, along with only those away-from-the-quote and near-the-quote NMLOs that eventually touch the NBBO (i.e., become executable). See supra note 1200 for definitions of these NMLO categories. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1442 and section IX.C.1.c)(2).

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The adopted amendment to include a separate order type category for midpoint-or-better orders [1444] will increase transparency on how reporting entities handle these types of orders (*e.g.,* whether or not they offer these orders price improvement) and reduce the extent to which including information about these orders along with other types of NMLOs may skew the execution quality statistics of other types of NMLOs. Several commenters stated that the proposed amendment should not create a separate category for beyond-the-midpoint limit orders, since it is not a large category of orders.[1445] One commenter additionally stated that the order category ''will become de minimis with the Market Data Infrastructure (''MDI'') round lot definitions.'' [1446] The Commission confirms that, while the adopted amendment to include both at-the-midpoint and beyond-the-midpoint orders into the new category will increase the size of the category, this category will still remain a relatively small percent of total orders.[1447] The Commission also acknowledges that the NBBO is anticipated to narrow for stocks priced above $250 as a result of the new definition of round lots, which would likely decrease the number of inside-the-quote NMLOs and increase the number of quotes at or outside of the quotes for these stocks.[1448] However,

[1444] *See* final 17 CFR 242.600(b)(19) (defining ''categorized by order type'' to include a category for midpoint-or-better limit orders); *see also supra* section III.B.2.b)(2).

[1445] *See, e.g.,* FIF Letter at 13; Schwab Letter II at 6; and Schwab Letter at 32.

[1446] *See* Schwab Letter II at 6.

[1447] As shown in Table 5, increasing the scope of this category to include at-the-midpoint NMLOs in addition to beyond-the-midpoint NMLOs will increase its size from 2.1% to 3.9% of shares submitted to exchanges at ATSs, and from 3.2% to 5.5% to shares submitted to wholesalers.

[1448] *See supra* section VII.C.1.d)(2) for further discussion. An analysis of the CAT data sample described in note 1182 *supra* shows that, in the quartile of stocks with the lowest quoted spreads

since some market centers treat these NMLOs more like marketable limit orders in certain contexts, it will be beneficial for market participants who use these orders as part of their trading strategies to have separate information about the execution quality of these orders,[1449] and thus the Commission has included them in the amended rule.

First, the high percentage of midpoint-or-better NMLOs submitted with IOC designations shown in Table 4 implies that a significant portion of these orders have the expectation of executing immediately, for example, against hidden or odd-lot liquidity inside of the spread. Therefore, these orders are likely to have different execution profiles than other types of NMLOs, such as faster time-to-execution. Furthermore, the Commission understands that different reporting entities treat beyond-the-midpoint NMLOs differently from other types of NMLOs, and that as a result beyond-the-midpoint NMLOs have systematically different execution quality characteristics than other types of NMLOs. For example, beyond-the-midpoint limit orders may be offered price improvement at some market centers, such as wholesalers, so the execution quality of these orders will be highly dependent on which type of market center to which the broker-dealer routes such orders.[1450] Requiring reporting entities to report execution quality statistics separately for midpoint-or-better orders will reveal differences in reporting entities' handling of these types of order.

Lastly, the adopted amendment assigns marketable, midpoint-or-better, and other non-marketable IOCs to separate order type categories so that they no longer will be commingled with other order types.[1451] This will increase transparency about the execution quality that reporting entities achieve both for IOCs and for other order types.[1452] Supporting the idea that IOCs tend to have different execution quality profiles than other orders, an analysis showed that IOCs on average have faster execution times and higher effective spreads than other orders, and that fill rates vary across market centers and according to order characteristics such as size.[1453] Information about the execution quality of IOCs will allow broker-dealers handling these types of orders to be able to better assess which market center on average offers better execution quality to these types of orders. These broker-dealers can thus make more informed decisions about where to route these orders. Furthermore, due to their different execution profiles, removing IOCs from other order categories will cause the execution quality metrics for other types of orders to more accurately reflect reporting entities' handling of other types of orders.[1454] The effect on the execution quality metrics of other types of orders will likely be significant, as an analysis of IOCs found that they make up more than 90% of marketable limit and midpoint-or-better share volume.[1455]

(b) Timestamp Conventions and Time-to-Execution

Several of these amendments will increase the relevance of time-to-execution information in Rule 605 reports, which in turn will improve market participants' ability to compare time-to-execution across reporting entities. For those investors that value fast executions, this is expected to lead to improved execution times, as investors will be better able to identify and route orders to reporting entities offering faster execution speeds.

First, the adopted amendment increasing the granularity of the timestamp conventions used for the time of order receipt and time of order execution from seconds to milliseconds, as well as requiring millisecond granularity for the time of executability,[1456] will make the time-to-execution statistics in Rule 605 more informative about the execution speeds achieved by a reporting entity.[1457] These statistics include the average share-weighted time-to-execution of shares executed with positive price improvement, without price improvement and with negative price improvement. Given that execution speeds measured in seconds are likely to miss much of the variation in execution times across reporting entities in today's markets, particularly for market and marketable orders,[1458] adding granularity to the timestamps used to calculate the time-to-execution speed measures included in Rule 605 reports will benefit market participants in their efforts to compare execution times across reporting entities.[1459]

One commenter, while generally recognizing benefits of smaller increments for time to execution statistics, stated that ''the more granular a timestamp needs to be, the more subject it is to variances across reporting entities,'' and that this has ''the potential to distort statistics.'' [1460] The commenter stated that such distortions derive from different practices around when to mark order receipt and from different geographic latencies in the receipt of market data, such as SIP data and exchange proprietary data feeds, used to assign quotation information to an event according to its timestamp. However, evidence suggests that geographic latencies, which may account for the majority of latency differences associated with the SIP data, are currently below a millisecond.[1461]

(an average quoted spread of around $0.026), midpoint-or-better orders still compromise a non-negligible percent of order flow, representing 5.15% of submitted orders (4.32% of submitted shares). This is compared to the quartile with the highest quoted spreads (an average quoted spread of $20.28), where midpoint-or-better orders are 9.66% of submitted orders (8.62% of submitted shares). Therefore, it is likely that midpoint-or-better orders will be a non-negligible percent of order flow, even if spreads narrow after the implementation of MDI.

[1449] *See also supra* section III.B.4.a)(2) for further discussion.

[1450] *See* Table 4, showing both beyond-the-midpoint and at-the-midpoint orders tend to have higher fill rates and faster execution time relative to other types of NMLOs.

[1451] To implement this change, the Commission is modifying the definition of ''categorized by order type'' to add midpoint-or-better limit orders that are immediate-or-cancel and executable non-marketable limit orders that are immediate-or-cancel, as well as to exclude IOCs from the order types for midpoint-or-better limit orders and executable NMLOs. *See* final 17 CFR 242.600(b)(19).

[1452] Commenters agreed that the separate reporting of IOC orders would make Rule 605 data more useful. *See, e.g.,* SIFMA AMG Letter at 6; SIFMA Letter at 25.

[1453] For example, exchanges and ATSs tend to have higher fill rates for IOC marketable limit orders (14.3%) than non-IOC marketable limit orders (11.6%), the opposite is true for wholesalers (18.3% compared to 74.3%). *See* Table 5 in *supra* section IX.C.3.c)(9).

[1454] *See supra* note 1265 and accompanying text for an example of how commingling IOCs with other order types can lower marker centers' incentives to improve execution quality for other marketable orders.

[1455] *See* Table 5 in *supra* section IX.C.3.c)(9) and corresponding discussion.

[1456] *See* final 17 CFR 242.600(b)(39), (102), and (103).

[1457] One commenter stated that more granular time-to-execution statistics would allow for more meaningful points of comparison. *See* Better Markets Letter at 8.

[1458] *See supra* section IX.C.3.c)(4) for a discussion of how the granularity of the time-to-execution categories previously defined in Rule 605 has lost relevance over time.

[1459] One commenter stated that the minimum granularity of milliseconds is ''the best approach at this time,'' stating that it is ''consistent with the Consolidated Audit Trail, which requires firms to report all order events with a minimum granularity of milliseconds.'' FIF Letter at 17.

[1460] *See* Robinhood Letter at 47.

[1461] *See, e.g.,* Letter from Patrick Sexton, EVP, General Counsel Corporate Secretary, *Cboe Global Markets, Inc. on the MDI Proposal,* (May 26, 2020) (stating that ''geographic latency accounts for the vast majority of the latency experienced by the SIPs today,'' and referencing geographic latency of around 416 microseconds between Carteret, NJ and Secaucus, NJ); *see also* Letter to Brent J. Fields, Secretary, Commission, from Michael Blaugrund, Head of Transactions, New York Stock Exchange (Oct. 24, 2018) (stating that, as ''processing time approaches zero, it is clear that the time required

Continued

Therefore, the distortions related to latencies are likely to be smaller than the timestamp granularity. Furthermore, it is likely that distortions may actually be reduced under these amendments. Under preexisting Rule 605, though many market centers timestamp to the millisecond or lower, market centers only had to look at timestamps at the second level, and match each order with the NBBO within that second. Matching to the second when there are multiple quotes per second can create distortions. Under preexisting Rule 605, when there are multiple quotes within a second, the market center would have needed to use a neutral method to assign the NBBO to an order. Of course, prior to these amendments, some market centers could have chosen to match to the millisecond as its neutral method. Under the final rule, reporting entities will be required to match to the millisecond. With latencies of under a millisecond and even with multiple quotes per millisecond, the distortions should be lower when matching to a millisecond than when matching to a second. In particular, the NBBO that is matched to a particular order is more likely to be closer to the actual time of order receipt.

Second, the amendments increasing the granularity of time-to-execution buckets [1462] will increase the relevance of the time-to-execution information in Rule 605, as the categories prior to these amendments have not been granular enough with respect to variations in execution times across reporting entities. One commenter stated that the inclusion of updated time-to-execution buckets in amended Rule 605 reports would provide greater granularity.[1463]

Figure 20 plots the distribution of share volume across the adopted time-to-execution buckets, using a sample of CAT data for 400 stocks for the period of Q1 2023.[1464] Since whether an order is submitted with an IOC designation can have a significant effect on its execution,[1465] results are presented separately for IOC and non-IOC orders. The results show that non-IOC shares are reasonably well distributed across the various buckets. While the majority of IOC orders (91.1%) are clustered in the shortest time bucket, some IOC volume is also distributed across longer time buckets. This shows that these time-to-execution buckets will also allow market participants to separate out IOC orders that are outliers in terms of time-to-execution.

for trade and quote data to travel from Participant datacenter -> SIP datacenter -> Recipient datacenter, or 'geographic latency,' is a larger portion of the total latency.''). In addition, *see* MDI Adopting Release, 86 FR 18596 at 18732 (Apr. 9, 2021), stating that ''[t]he record in this rulemaking suggests that the geographic latency of SIP data may be up to a millisecond.''

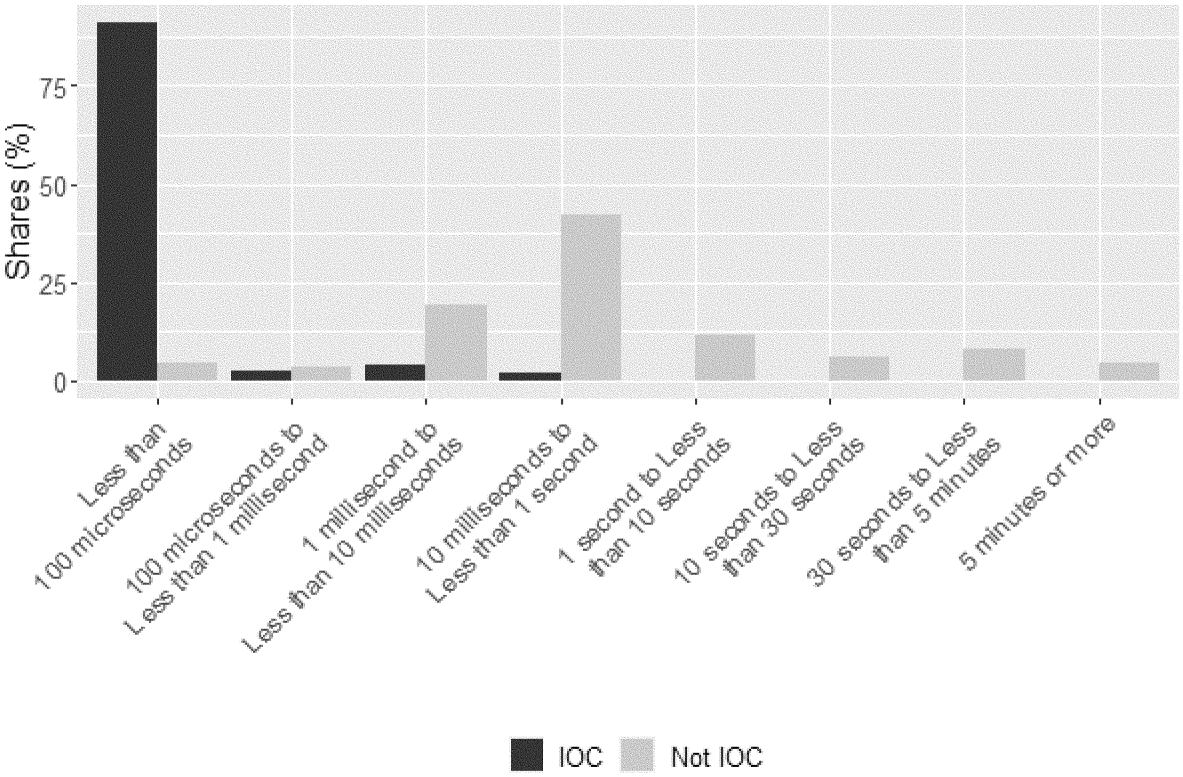
[1462] *See* prior 17 CFR 242.605(a)(1)(i)(F) through (J) (detailing time-to-execution buckets of 0 to 9 seconds, 10 to 29 seconds, 30 to 59 seconds, 60 to 299 seconds and 5 to 30 minutes after the time of order receipt). These will be replaced by the following buckets: less than 100 microseconds; 100 microseconds to less than 1 millisecond; 1 millisecond to less than 10 milliseconds; 10 milliseconds to less than 1 second; 1 second to less than 10 seconds; 10 seconds to less than 30 seconds; 30 seconds to less than 5 minutes; and 5 minutes or more. *See supra* section III.B.3.b) and final 17 CFR 242.605(a)(1)(i)(G) through (N).

[1463] *See* Healthy Markets Letter at 17. Specifically, the commenter stated that, ''[b]y creating buckets for timestamp, rather than average time to execution [as proposed], the reports would provide much greater granularity while still allowing a user of the data to recreate average time to execution.'' See the Proposing Release, 88 FR 3786 at 3812–3813 (Jan. 20, 2023), for a discussion of the proposed amendment to replace time-to-execution buckets with time-to-execution statistics; *see also infra* section IX.E.3.b)(1) for further discussion of adopting time-to-execution statistics as proposed as a reasonable alternative.

[1464] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1211 for dataset description.

[1465] *See, e.g.,* the results in Table 5.

Figure 20: Distribution of Shares Across Time-to-Execution Buckets by IOC Type, Q1 2023

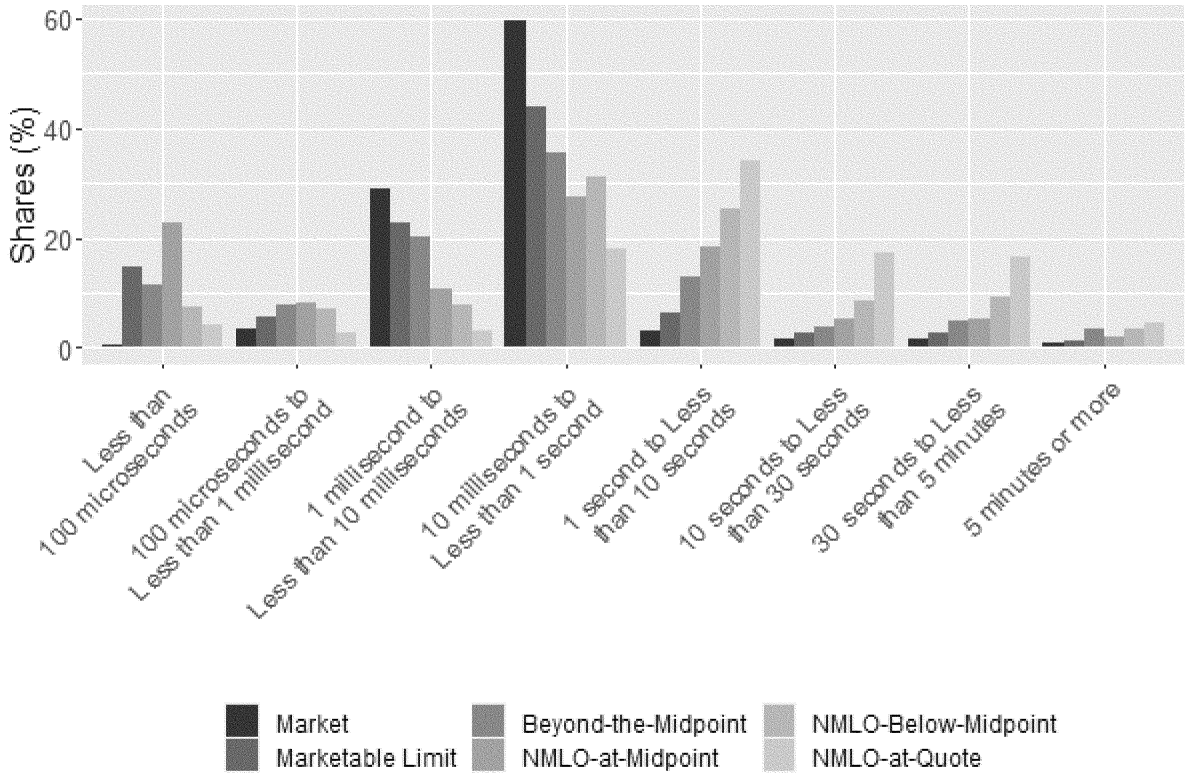


This figure shows the distribution of executed shares across time-to-execution buckets for IOC vs. non-IOC orders. Percentages are calculated as the number of shares that executed within a particular time horizon for a given IOC type, summed across all stocks and days in the sample, divided by the total number of executed shares for a given IOC type, summed across all stocks and days. Execution times are calculated as the time of order receipt (which, for at- and inside-the-quote NMLOs, is equivalent to the time of executability) to the first time that one or more of the order's shares are executed. The analysis uses a sample of CAT data for 400 stocks. See supra note 1211 for dataset description.

Figure 21 also plots the distribution of share volume across the adopted time-to-execution buckets, this time breaking the result down by order type.[1466] The results show that the time-to-execution buckets are also able to capture variation in execution times across different order types, with most market and marketable limit orders clustered at the faster time buckets, and most at-the-quote NMLOs clustered in the longer time buckets.

[1466] This analysis uses CAT data for 400 stocks for the period Q1 2023. *See supra* note 1211 for dataset description. This dataset is from prior to the implementation of the MDI Rules and the distribution of orders into various NMLO categories may change following the implementation of the MDI Rules. *See supra* note 1204 and section IX.C.1.c)(2). However, it is not clear how a change in the distribution of orders into various NMLO categories will affect the average time-to-execution of these NMLO categories.

Figure 21: Distribution of Shares Across Time-to-Execution Buckets by Order Type, Q1 2023



This figure shows the distribution of executed shares across time-to-execution buckets for different order types. Percentages are calculated as the number of shares that executed within a particular time horizon for a given order type, summed across all stocks and days in the sample, divided by the total number of executed shares for a given order type, summed across all stocks and days. The analysis uses a sample of CAT data for 400 stocks. See supra note 1211 for dataset description and supra note 1200 for definitions of the NMLO categories. Execution times are calculated as the time of order receipt (which, for at- and inside-the-quote NMLOs, is equivalent to the time of executability) to the first time that one or more of the order's shares are executed. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1466 and section IX.C.1.c)(2).

The amendments requiring time-to-execution information to be reported for all order types will help ensure that all order types benefit from increased transparency.[1467] However, commenters stated that, because marketable limit orders that exceed the consolidated quote size may be only partially executed or take longer to execute, time-to-execution information for this order type ''would be difficult to interpret'' [1468] and ''would be impacted by factors that do not reflect a true comparison of the execution performance across firms.'' [1469] The Commission recognizes that execution times will be longer for marketable limit orders that do not fully execute and are partially posted to the limit order book, and that this may in some cases be the result of factors that are not directly within a reporting entity's control, such as the size of the order. However, other information contained in Rule 605 reports, such as information about order size, will allow consumers of Rule 605 data to control for such factors, which will facilitate consumers' ability to interpret time-to-execution information for marketable limit orders and to make apples-to-apples comparisons across reporting entities.[1470]

Finally, these amendments will require NMLO execution times to be measured from the time that the order becomes executable rather than from the time of order receipt.[1471] This will help ensure that this metric is more likely to capture the portions of execution speed that are within a reporting entity's

[1467] One commenter supported the inclusion of time-to-execution information for all order types. *See* Nasdaq Letter at 45: ''We concur with the SEC that requiring average time-to-execution for all order types . . . would offer more consequential information.''

[1468] *See* Rule 605 Citadel Letter at 10.

[1469] *See* FIF Letter II at 3. Specifically, the commenter stated ''that firms that receive marketable orders that are larger relative to the opposite-side displayed NBBO quantity would show a longer time to execution as compared with firms that receive marketable orders that are smaller relative to the opposite-side displayed NBBO quantity.'' FIF Letter II at 3. Similarly, another commenter stated that ''the execution speed metric for marketable limit orders should be limited to the size available at the best protected quote at the far touch. This will ensure that orders larger than the quoted size that take out the best price and then are reflected for the balance don't skew statistics.'' Schwab Letter II at 32.

[1470] *See supra* section III.B.3.b) for further discussion.

[1471] *See* final 17 CFR 242.605(a)(1)(i)(G) through (N).

control, rather than dependent on market conditions.[1472]

For those investors that value fast executions, these amendments are expected to lead to improved execution times, as the increased transparency around reporting entities' execution times will increase these investors' ability to identify and route orders to reporting entities offering faster execution speeds.[1473] The Commission expects these benefits to mainly accrue to investors that value faster executions, as these investors (and their broker-dealers) will benefit from an improved ability to compare execution speeds across trading venues and route their orders accordingly. However, to the extent that changes in order flow will result in an increase in market centers' incentives to offer faster executions, *e.g.,* by investing in faster trading technology, this may result in a market-wide increase in trading speeds for all investors.

One individual investor stated that focusing on the speed of execution only benefits high-frequency traders, and that the commenter is more concerned as a retail investor with getting a fair price for their trades than with the speed of execution.[1474] The Commission recognizes that different investors benefit from faster execution times for different reasons, and that some investors will not always benefit from faster execution under all circumstances.[1475] However, individual investors will benefit from faster executions in circumstances where the faster execution of their orders results in better prices. For example, time-to-execution is an important metric for market orders submitted with stop prices, which an analysis finds constitute 4.91% of market orders submitted by individual investors.[1476] Since these orders tend to be triggered during volatile markets, any delay in execution can result in worse price if prices are increasing (for buy orders) or decreasing (for sell orders). For IOCs, a faster routing time reduces the chance of another order stepping in and removing liquidity before the order gets a chance to execute, thus increasing the order's probability of execution.[1477]

For institutional investors, the benefits of fast execution may be different.[1478] Institutional investors, who often need to trade large positions, may care more about reducing the price impact of their order rather than executing the order quickly.[1479] However, the academic literature suggests that institutional investors with short-lived private information may benefit from faster execution times, as they are able to profit from trading against other, slower institutions.[1480] On the same note, faster execution times benefit slower institutional investors by reducing their exposure to adverse selection as much as possible.[1481] Institutional investors may also care about the execution speed of their child orders.[1482]

(c) Execution Quality Metrics

The amendments to Rule 605 will improve the relevance of the information contained in Rule 605 reports by increasing the granularity of time-to-execution buckets; modifying the calculations of average realized spreads; expanding existing requirements to report average effective spreads to midpoint-or-better orders; adding additional metrics such as percentage realized and effective spreads, effective over quoted spreads, and size improvement; and modifying the categorization of riskless principal trades.

(i) Realized Spread

The adopted amendment modifying the time horizon used to calculate the realized spread from a single horizon of five minutes to a range of horizons between 50 milliseconds and 5 minutes[1483] will increase the relevance and usability of this measure. One of the uses of realized spread is to derive a measure of price impact of the order flow,[1484] which, depending on the horizon of the liquidity provider, can measure the adverse selection risk that the liquidity provider faces.[1485] Adverse

[1472] For example, even if a limit order is placed $0.05 away from the quote, if the market moves away and only 25 minutes later returns to a price level where the limit order executes, the time to execution for that order from the time of order receipt is less reflective of execution quality than of prevailing market conditions.

[1473] *See supra* section IX.C.3.c)(4) for a discussion of current executions speeds.

[1474] *See* Gillmore Letter.

[1475] *See, e.g.,* Ekkehart Boehmer, *Dimensions of Execution Quality: Recent Evidence for US Equity Markets,* 78 J. Fin. Econ. 553 (2005) (''Boehmer (2005)''), which documents a negative relationship between execution speed and price.

[1476] *See* Table 3 in *supra* section IX.C.3.b)(2).

[1477] *See, e.g.,* Matteo Aquilina et al., *Quantifying the High-Frequency Trading ''Arms Race,''* 137 Q. J. Econ. 493 (2021) (''Aquilina et al.''), who find that traders with failed attempts to trade or cancel orders, such as submitters of IOC orders that fail to execute, lose about half a tick as a result of the failure. While the per-trade cost is small, the cost of these failures adds up to around $5 billion annually in global equity markets.

[1478] While institutional investors are likely to have access to alternative sources of more granular information about execution speeds, such as reports obtained through TCA, the information on execution quality that is individually collected by institutional investors is typically nonpublic and highly individualized, and therefore limited to the execution quality obtained from broker-dealers with which the institutional investors currently do business. Since Rule 605 reports are public, institutional investors can use these reports to assess the execution quality of the broker-dealers and market centers with which they do not currently do business. *See supra* section IX.C.2.c) for further discussion.

[1479] *See supra* section IX.C.4.a)(1)(b) for a discussion of the handling of institutional orders by broker-dealers as not held orders.

[1480] *See, e.g.,* Kadan et al., *supra* note 1225.

[1481] *See, e.g.,* Brogaard et al., *supra* note 1225.

[1482] *See, e.g.,* Beason and Wahal at 17, who examine the time-to-fill of algorithmic child orders, and find that the time-to-execution and time-to-cancellation of these orders ''indicate a clear price-time tradeoff in the data.''

[1483] *See* final 17 CFR 242.605(a)(1)(i)(O) through (X); *see also supra* section III.B.4.a)(2).

[1484] *See supra* note 1228, describing how realized spreads can be decomposed into the difference between the effective spread and price impact. As discussed in note 1228, *supra,* differences between the times at which realized spreads and effective spreads are measured can cause this decomposition to be inexact. After the implementation of these amendments, the realized spread will continue to be measured using the price at the time of order execution, while effective spreads will be measured using the midpoint price at the time of order receipt (or order executability, in the case of midpoint-or-better orders). To the extent that there are significant differences in the time of order receipt (or executability) and the time of order execution, the decomposition of realized spreads in the amended Rule 605 reports into effective spreads and price impact will continue to not be exact. This effect is likely to vary depending on the order type. For example, Figure 21 shows that 37.5% of marketable limit orders are executed within 10 milliseconds after order receipt, while only 7.2% of at-the-quote NMLOs are executed within 10 milliseconds after order executability (which, for these orders, is the same as the time of order receipt). Therefore, for example, this effect is expected to be greater for at-the-quote NMLOs than for marketable limit orders.

[1485] *See supra* note 1229 and accompanying text for a discussion of price impact as a measure of the adverse selection risk faced by liquidity providers. In some cases, market participants will be able to use the data in amended Rule 605 reports to estimate price impact using effective and realized spreads. These estimates of price impact measures may be subject to the time asynchronies, and, as described in *supra* note 1484, the extent to which these asynchronies lead to inexact measures of price impact is likely to vary along with the order type. In addition, because the effective spread is required to be reported only for market and marketable order types as well as midpoint-or-better orders, the ability of market participants to estimate price impact will only be possible for these order types. *See supra* section III.B.4.b)(2) for further discussion. However, for those order types for which effective spreads are not available, or for which the time asynchronies are expected to lead to inexact measures of price impact, market participants will still be able to use the fact that amended Rule 605 reports will contain a broad range of realized spread time horizons to gain insights into adverse selection risk. Specifically, since price impact will increase as the time horizon increases (*see supra* note 1235 for further discussion), while the effective spread remains constant, examining how realized spreads change as the time horizon increases will give market participants insight into the rate at which the price impact, and therefore adverse selection risk, increases as the time horizon increases. Market participants could use this information to determine, for example, whether adverse selection

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selection risk of order flow can vary over time and across stocks and entities. Therefore, realized spreads provide context for other measures of execution quality. The preexisting requirement to use a single five-minute time horizon to calculate realized spreads for the purposes of Rule 605 disclosures has likely limited market participants' ability to use realized spreads to control for adverse selection, particularly for larger and more liquid stocks.[1486]

Selecting an appropriate time horizon to calculate the realized spread must strike a balance between too short, which could fail to incorporate the realization of the price impact, and too long, which could include additional noise [1487] or the cumulative impact of subsequent market changes which are unrelated to the order's execution quality.

Referencing the Commission's analysis of realized spread time horizons in the Proposing Release, one commenter stated that ''the Commission has not appropriately analyzed inventory turnover, which is necessary to convey relevant meaning to the analysis.'' [1488] The Commission acknowledges that an ideal measurement horizon would be one that aligns with the amount of time an average liquidity provider holds onto the inventory positions established from providing liquidity. As discussed in the Proposing Release, the amount of time an average liquidity provider holds onto the inventory positions established from providing liquidity is not easily observable.[1489] Instead, the Commission's analysis of realized spreads in the Proposing Release [1490] was based on the theoretically motivated and empirically observed decline in realized spreads over increasing time horizons, similar to the academic literature.[1491]

Table 7 [1492] replicates this analysis using an updated sample of TAQ data for 400 stocks for the period of Q1 2023,[1493] and shows that the cumulative decline in realized spread captured at different time horizons varies by market capitalization. Approximately 90% of the cumulative decline in realized spread is captured by the 15-second horizon for the largest market capitalization group, compared to only about 50% for the smaller market capitalization groups. At the one-minute horizon, approximately 75% of the realized spread is captured for the smaller market capitalization groups. This echoes the results from the Proposing Release,[1494] and also supports results from the academic literature, as one paper similarly recommends a shorter time horizon for large stocks and a longer time horizon for small stocks.[1495]

Table 7: Cumulative Decline in Average Realized Spread, by Time Horizon

	Horizon					
Market Capitalization Group	**10ms-5min($)**	**50ms**	**1sec**	**15sec**	**1min**	**5min**
<$100 million	0.015	10.8%	15.7%	51.2%	77.4%	100.0%
$100 million - $1 billion	0.014	8.1%	22.5%	51.7%	74.4%	100.0%
$1 billion - $10 billion	0.018	8.3%	32.7%	67.6%	89.2%	100.0%
>$10 billion	0.020	11.5%	45.3%	89.5%	105.8%	100.0%

In order to examine the rate at which realized spreads decline across increasing time horizons, this table presents the difference between dollar realized spreads calculated using a 10-millisecond time horizon and realized spreads calculated using a five-minute time horizon, along with the cumulative percentage of this difference that realized at various intermediate time horizons (50 milliseconds, 1 second, 15 seconds, 1 minute, and 5 minutes), using data from TAQ. Results are presented for stocks across different market capitalization groups. Measures grouped by size quartile were calculated on a stock-day basis, then averaged by stock, then averaged within each size quartile. See supra note 1238 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and numbers may be different following the implementation of the MDI Rules. See supra note 1493 and supra section IX.C.1.c)(2).

risk increases at a rapid pace as the time horizon increase, which could signal more adverse market conditions.

[1486] A number of academic studies argue that the five-minute horizon is too long for a high-frequency environment. *See, e.g.,* O'Hara 2015; O'Hara et al.; Conrad and Wahal, *supra* note 544.

[1487] The term ''noise'' is used throughout in the statistical sense and refers to unexplained or unrelated variability in observations that degrades the efficiency of computed statistics or estimators.

[1488] *See* SIFMA Letter at 32.

[1489] *See* Proposing Release, 88 FR 3786 at 3854 (Jan. 20, 2023). For example, while it would be theoretically possible to use CAT data to estimate market maker turnover, it would not be possible to estimate inventory levels, as starting inventory levels accumulated prior to the availability of CAT data are not observable.

[1490] *See* Table 1 of the Proposing Release, 88 FR 3786 at 3815 (Jan. 20, 2023).

[1491] *See* Conrad and Wahal, *supra* note 544. As described in *supra* note 1235, one way to interpret the decline in realized spread is as a function of the realization of price impact. An optimal time horizon would be one that is long enough to capture most of the realization of price impact, but not long enough to incorporate noise.

[1492] The TAQ data used in this analysis have been updated since the Proposing Release to account for a more recent time period. In addition, the methodology has been updated to include additional time horizons. *See* Proposing Release, 88 FR 3786 at 3815 (fig. 1) (Jan. 20, 2023), which presents a similar analysis that uses data from Feb. 2021 (*see* Proposing Release, 88 FR 3786 at 3854, n.706 (Jan. 20, 2023), for data description), and includes six time horizons (1 second, 5 seconds, 10 seconds, 15 seconds, 1 minute, and 5 minutes); *see supra* note 1237. Also, while Table 1 of the Proposing Release similarly presented the additional (*i.e.,* non-cumulative) variation at each time interval, for clarity, the analysis in Table 7 presents the cumulative decline in average realized spreads at each time horizon. However, despite these updates, this analysis continues to show that time horizons of 15 seconds and one minute capture most of the realized spread information for larger stocks, for the two smaller-stock groups, a sizeable proportion of the overall decline does not occur until the 5-minute horizon.

[1493] *See supra* note 1238 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and the specific numbers may be different following the implementation of the MDI Rules. In particular, for certain stocks, the NBBO midpoint may change, though the Commission is uncertain of the direction of this effect. This may impact statistics that are based on these values, including realized spreads. *See supra* section IX.C.1.c)(2)IX.C.1.c)(2). While specific numbers might change, the Commission does not expect the relative variation in realized spreads across different time horizons to change as a result of the implementation of the MDI Rules.

[1494] *See* Table 1 of the Proposing Release, 88 FR 3786 at 3815 (Jan. 20, 2023).

[1495] *See* Conrad and Wahal, *supra* note 544.

Echoing the Commission's statements in the Proposing Release, Table 7 also shows that, for smaller stocks, a sizeable proportion of the overall decline in realized spreads (around 23–26%) does not occur until the five-minute horizon. Therefore, retaining the five-minute horizon will be useful in capturing additional information about realized spreads, particularly for the smallest stocks.[1496]

Other commenters similarly stated that the Commission did not provide a basis for its selection of realized spread time horizons.[1497] In response to commenters and to add robustness to its analysis, the Commission has expanded its analysis of optimal realized spread time horizons in this Adopting Release to include two additional empirical approaches.

First, as described in section IX.C.3.(c)(5), realized spreads can be decomposed into effective spreads and price impact. Price impact is designed to measure the change in a stock's fundamental value following a trade; if a market maker is trading against a more informed trader, price impact will capture the adverse price movement for the market maker resulting from the incorporation of the informed trader's private information into prices.[1498] If the time horizon is too short, this change in the fundamental value will not yet be fully realized, and thus the measure of price impact (and thus the measure of realized spreads) will be deficient. On the other hand, if the time horizon is too long, measures of price impact and realized spread will incorporate too much noise. Therefore, an ideal time horizon for calculating the realized spread would be one that incorporates the lowest amount of noise into the measurement of the price impact component of realized spreads. To examine how the noise evolves over different time horizons, the Commission used the sample of TAQ data described above to examine the noisiness of measurements of price impact at different time intervals for different market capitalization groups,[1499] measuring noise using the coefficient of variation (ratio of the standard deviation to the mean). The results are presented in Figure 22, which shows that the coefficient of variation of price impact decreases as the time horizon increases for smaller stocks, but increases as the time horizon increases for larger stocks. In other words, the time horizon that minimizes noise and best captures the inventory risk of liquidity providers varies depending on the market capitalization and liquidity of the stock. As a result, including multiple time horizons for realized spreads will make this measure more relevant across a wider range of stocks.

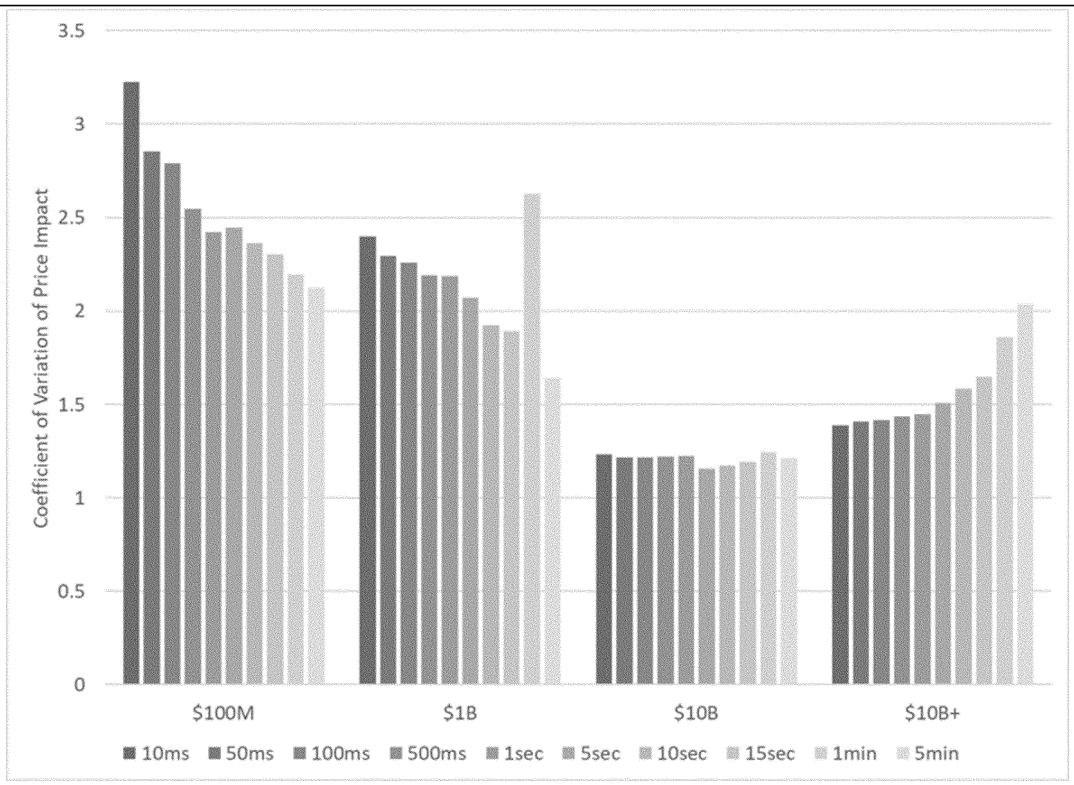
[1496] In the Proposing Release, the Commission stated that ''requiring an additional specification of realized spreads would entail adding another data item, which would also increase the complexity of Rule 605 reports.'' Proposing Release, 88 FR 3786 at 3892 (Jan. 20, 2023). For this reason, the Commission is requiring only two of the five realized spread horizons to be included in the Summary Reports (*see supra* section IV.B.1.b). However, for the full Rule 605 reports, the Commission agrees with a commenter that the detailed Rule 605 reports are ''intended to be machine-readable, not human-readable,'' and that ''[a]dding rows and columns to the Rule 605 report, within reason, would not materially increase the costs of processing these reports and storing the relevant data.'' FIF Letter at 16.

[1497] *See, e.g.,* Virtu Letter II at 14, stating that ''it is unclear what the basis is for bluntly measuring realized spreads at 15 seconds and one minute;'' and SIFMA Letter at 32, stating that ''The Commission also has not provided a rational basis for its method of calibrating the realized spread time frames (*i.e.,* 15 seconds and one minute).''

[1498] *See supra* note 1229 for an example.

[1499] Following the academic literature, results are presented separately for different market capitalization groups as a proxy for different liquidity variables, with high market capitalization correlating closely with higher liquidity. *See supra* note 1239 and corresponding text.

Figure 22: Coefficient of Variation of Price Impact Measures Across Time Horizons and Market Capitalization, Q1 2023



This figure plots coefficient of variation of price impact estimates across various time horizons, measuring the coefficient of variation as the ratio of the standard deviation of price impact measures within a time horizon to the mean measure of price impact. Price impact is measured as twice the signed different between the midpoint five minutes after an order's execution minus the midpoint at an order's time of execution. The measures are calculated using TAQ data for a sample of 400 stocks. Results are presented for stocks across different market capitalization groups. Measures grouped by size quartile were calculated on a stock-day basis, then averaged by stock, then averaged within each size quartile. See supra note 1493 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1493 and section IX.C.1.c)(2).

Second, as an additional method for measuring the time horizon that minimizes the noise embedded in the price impact component of realized spread measures, the Commission used the sample TAQ data described above [1500] to estimate the signal-to-noise ratio in price impact estimates using an Ordinary Least Squares (OLS) regression.[1501] The regression is estimated separately for each time interval considered.[1502] Subsequently, for each time interval, the signal-to-noise ratio is measured as the ratio of the variation in price impact that is explained by the explanatory variables of the regression (the ''signal'') to the standard deviation of the residual from the regression, *i.e.,* the variation in price impact that is uncorrelated with the explanatory variables (the ''noise'').[1503] A higher signal-to-noise ratio corresponds to a more informative measure of price impact, and therefore a more informative measure of realized spread.[1504]

Figure 23 presents these ratios over all the time intervals for four market capitalization groups and shows clear differences between smaller and larger stocks. First, it is clear from the figure that larger, more liquid stocks have more informative measures of price impact than smaller, less liquid stocks. Second, for the two smaller stock groups, the results show a small but steady increase in the signal-to-noise ratio as the time horizon increases, implying that realized spread measures are becoming more informative as the noise in the price impact component decreases. This result supports

[1500] *See supra* note 1238 for dataset description.

[1501] We regress price impact on explanatory variables identified as key drivers of price impact. Specifically, we include the (inverse of) trade price, logarithms of market capitalization and total trade volume, intra-day volatility and order imbalance, as well as the (logarithm of) share volume of retail trades and order imbalance of retail trades. These variables are similar to those in, *e.g.,* A. Anand, P. Irvine et al., *Performance of Institutional Trading Desks: An Analysis of Persistence in Trading Costs,* 25 Rev. Fin. Studs. 557 (2012) and G.W. Eaton et al., *Measuring Institutional Trading Costs and the Implications for Finance Research: The Case of Tick Size Reductions,* 139 J. Fin. Econ. 832 (2021). The regression is estimated using daily estimates at the stock level.

[1502] These time intervals are constructed using the following time horizons: 10 milliseconds, 50 milliseconds, 100 milliseconds, 500 milliseconds, 1 second, 5 seconds, 10 seconds, 15 seconds, 1 minute, and 5 minutes.

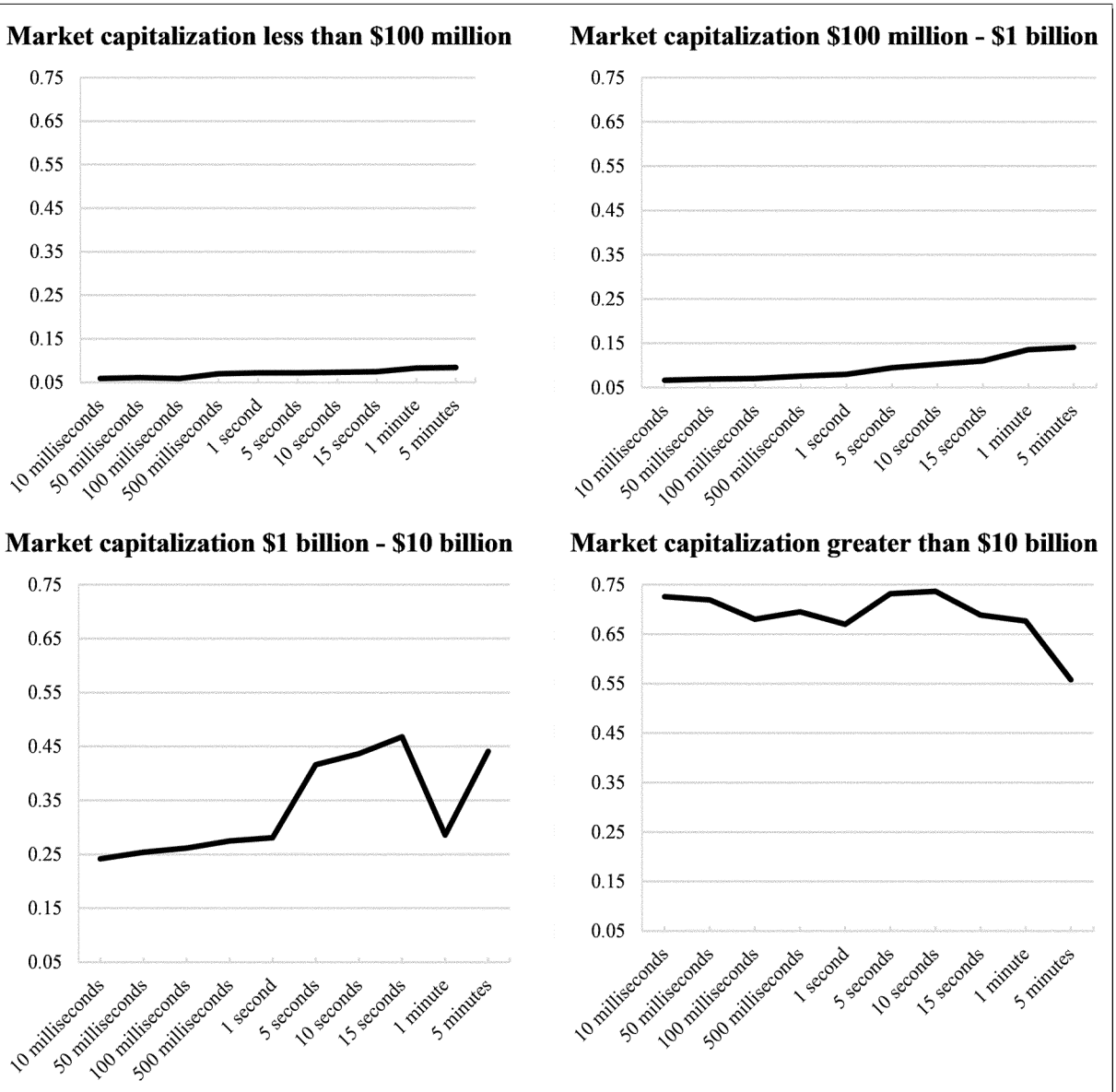
[1503] The underlying assumption is that the systematic variation in price impact is fully explained by the explanatory variables described in note 1501, *supra.* It is possible that there are variables, not included in the regression and not sufficiently correlated with the included variables, that are systematically driving the variation in price impact. These variables would be captured in the regression residual, which would inflate the estimate of the noise. However, to the extent that the effects of these omitted variables are relatively constant across time horizons, this should not drive the patterns in the signal-to-noise ratios across time horizons observed in Figure 19 *infra.*

[1504] *See, e.g.,* G.P. Swann, *Is Precise Econometrics An Illusion?,* 50 J. Econ. Educ. 343–355 (2019).

including a longer time horizon, *i.e.,* 5 minutes, which maximizes the signal-to-noise ratio for these stocks.[1505] Meanwhile, the largest stock group shows a different pattern: for these stocks, the signal-to-noise ratio is largely decreasing in the time horizon, meaning that realized spreads are less informative at longer intervals. This result supports including a shorter time horizon, *i.e.,* 10 or 50 milliseconds. The fact that the analysis for the smallest market capitalization stocks supports the inclusion of the longest time horizon examined, while the analysis for the largest market capitalization group points to the inclusion of the shortest time horizon examined, supports the inclusion of multiple time horizons across a broad range.

[1505] Figure 23 also shows a slight and temporary increase in the signal-to-noise ratio between 1 to 10 seconds for the largest market capitalization group, which could imply that a 1-second horizon is as informative as a 10 or 50 millisecond horizon. However, Figure 18 shows a monotonic increase in noise as the time horizon increases for the largest market capitalization group, implying that a shorter time horizon is always less noisy than a longer time horizon for these stocks. For this reason, there is additional value in including a time horizon that is shorter than one second.

Figure 23: Signal-to-Noise Ratios in Price Impact Measures by Market Capitalization and Time Horizon, Q1 2023



This figure plots the estimated signal-to-noise ratios for different market capitalization groups over different time intervals. The signals and noises are estimated using the predicted values and residuals form regression analyses where price impacts are regressed on security and transaction characteristics. Signals are measured with the variation in the predicted values of price impacts while noises are measured using the variation in residuals. The analysis used data from TAQ, see supra note 1023 for dataset description. Measures are winsorized at the 5% and 95% level. Measures grouped by size quartile were calculated on a stock-day basis, then averaged by stock, then averaged within each size quartile. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1025 and section IX.C.1.d)(2).

While some commenters supported the usefulness of realized spreads as a measure of order flow characteristics,[1506] several commenters opposed the inclusion of realized spread statistics in amended Rule 605 reports.[1507] One commenter stated that they ''[do] not believe a one-size-fits-all metric can work'' because ''market participants all have different views as to what time period(s) is appropriate to measure realized spread, and this can also vary based on the specific symbol and type of order flow involved.'' [1508] The Commission agrees, and this is why the Commission is adopting a range of realized spread metrics, each with a different time horizon, such that consumers of Rule 605 reports will be able to use different realized spread according to their potentially different needs or preferences. Another commenter stated realized spreads ''become largely useless when attempting to compare different types of order flow or market centers,'' such as between on-exchange and off-exchange trading.[1509] While the commenter did not clarify why realized spreads are not able to be used to compare different types of order flow, offering market participants a range of time horizons will help market participants control for differences in order flow and market conditions, as they will be able to choose the time horizons that best suit their needs and the reporting entities' mix of stocks in terms of size and liquidity. Offering a range of realized spread time horizons is also consistent with industry practice among market participants, who often use ''mark-out curves'' to compare across a range of time horizons, including at time horizons less than one second.[1510] In addition, the Commission understands that the one-second time horizon is often used in industry,[1511] and so including the one-second horizon in Rule 605 reports will help bring reported realized spreads in line with industry practice.

(ii) Effective Spread

The adopted amendment to require reporting entities to include information about average effective spreads for midpoint-or-better NMLOs,[1512] in addition to market and marketable limit order types, will increase transparency about the availability of favorable executions for these types of orders.

For midpoint-or-better NMLOs, the high percentage of these orders submitted with IOC designations shown in Table 4 implies that a significant portion of these orders have the expectation of executing immediately, for example, against hidden or odd-lot liquidity inside of the spread. By definition, midpoint-or-better NMLOs will have an effective spread that is either zero (if at-the-midpoint) or positive (if beyond-the-midpoint), reflecting that the more aggressive of these orders are paying a higher percentage of the spread for this immediacy.[1513] If a market center is offering lower effective spreads for midpoint-or-better NMLOs on average, that means that the market center is able to execute these orders closer to the midpoint, *e.g.,* because the market center has liquidity available within the spread, or, in the case of wholesalers, the market center is willing to offer price improvement to beyond-the-midpoint orders and execute them at the midpoint. Therefore, information about effective spreads for midpoint-or-better NMLOs will allow traders that use these orders as part of their trading strategies (and their broker-dealers) to make comparisons across market centers based on the profitability of these strategies.

One commenter disagreed that price improvement information for beyond-the-midpoint orders will be useful for comparing across market centers because some of the price improvement of these orders is driven by the order's limit price, which is controlled by the investor, and not the market center.[1514] The Commission agrees with the commenter that some of the price improvement for midpoint-or-better NMLOs, including the average effective spread, will be driven by the average limit prices of these orders received by a market center.[1515] This may make it so

[1506] These commenters discussed the usefulness of realized spreads within the context of advocating for their inclusion in Rule 605 summary reports. In particular, one commenter stated that, when combined with effective spread statistics to calculate price impact, realized spreads ''provide better transparency regarding the distinct characteristics of order flow among brokers.'' Schwab Letter II at 3. Another commenter stated that ''the impact of . . . order flow characteristics [such as whether orders are classified by market participants as more or less informed or the size of orders relative to a stock's average daily value] can be measured, at least in part, through statistics such as realized spread and price impact.'' FIF Letter at 31–32.

[1507] *See, e.g.,* SIFMA Letter at 32; Virtu Letter at 12; Rule 605 Citadel Letter at 8. In addition, one commenter stated that they ''do not believe realized spread is a key execution quality metric for retail investors.'' Robinhood at 46. The Commission agrees that realized spread is not a measure of execution quality. As stated in the Proposing Release and elsewhere in this release, realized spreads are useful for allowing market participants to control for differences in adverse selection risk across different market centers. *See, e.g.,* Proposing Release, 88 FR 3786 at 3853, n.701 (Jan. 20, 2023) and corresponding text.

[1508] *See* SIFMA Letter at 32.

[1509] *See* Citadel Letter at 8.

[1510] *See, e.g., Bringing the Power of Signal V6 to D-Limit,* IEX (Oct. 31, 2023), *available at https://www.iex.io/article/bringing-the-power-of-signal-v6-to-d-limit* (looking at mark-outs ranging from 1 millisecond to 1 minute); What Markouts Are and Why They Don't Always Matter, *supra* note 551 (looking at mark-outs ranging from 0 milliseconds to 1 minute); Securities Exchange Act Release No. 98625 (Sept. 28, 2023), 88 FR 68711 at 68713 (Oct. 4, 2023) (SR–IEX–2023–10) (looking at mark-outs ranging from 1 millisecond to 1 second); *The Midpoint Extended Life Order (M–ELO): M–ELO Holding Period,* NASDAQ (Feb. 13, 2020, 3:57 p.m. EST), *available at https://www.nasdaq.com/articles/the-midpoint-extended-life-order-m-elo%3A-m-elo-holding-period-2020-02-13* (looking at mark-outs ranging from 0 milliseconds to 1 minute); *MatchIt ATS Monthly Execution Metrics,* Virtu, *available at https://www.virtu.com/about/transparency/* (last visited Feb. 1, 2024, 1:34 p.m.) (looking at mark-outs ranging from 500 milliseconds to 1 minute); and *How Periodic Auctions Enhance Trading in Europe and the U.S.,* CBOE (Sept. 13, 2023), *available at https://www.cboe.com/insights/posts/how-periodic-auctions-enhance-trading-in-europe-and-the-u-s/* (looking at mark-outs ranging from 0 milliseconds to 1 second).

[1511] *See, e.g.,* All-in Economics to Trade Are What Matters Most, *supra* note 551; Proof's Public-facing TCA: Latest Results Over One Year of Data, ProofTrading (Mar. 23, 2023), *available at https://prooftrading.com/docs/tca-202303.pdf*; and Securities Exchange Act Release No. 81484 (Sept. 28, 2023), 88 FR 68711 at 68713 (Oct. 4, 2023) (SR–IEX–2023–10); Sean Spector & Tori Dewey, *Minimum Quantities Part I: Adverse Selection,* IEX (Nov. 11, 2020), *available at https://www.iex.io/article/minimum-quantities-part-i-adverse-selection*; and Diana Kafkes et al., *Applying Artificial Intelligence & Reinforcement Learning Methods Towards Improving Execution Outcomes* (working paper Oct. 10, 2022), *available at https://ssrn.com/abstract=4243985* (retrieved from SSRN Elsevier database).

[1512] *See* final 17 CFR 242.605(a)(1)(ii)(B); *see also supra* section III.B.4.(b)(2).

[1513] By contrast, NMLOs that are priced worse than the midpoint will tend to have negative effective spreads (*i.e.,* a gain). The Commission proposed including effective spreads for all NMLOs, and stated that effective spreads for NMLOs can be negative. Further, the Commission characterized the effective spread for NMLOs as a measure of ''how much customers can expect to be compensated for providing liquidity.'' Proposing Release, 88 FR 3786 at 3869 (Jan. 20, 2023). One commenter stated that ''[t]he effective spread is not widely accepted as a meaningful measure of execution quality for NMLOs,'' and that ''[f]or orders submitted outside of the NBBO, the metric essentially amounts to negative one times the quoted spread at the moment the order becomes executable.'' Virtu Letter at 14. The Commission agrees that this is the case. Furthermore, this will also be the case for orders submitted at the NBBO as well. Thus, for these orders, effective spread is a less meaningful measure of execution quality than for midpoint-or-better NMLOs, and thus is not adopting a requirement for effective spreads to be reported for NMLOs submitted at or below the NBBO.

[1514] *See* Schwab Letter at 32.

[1515] This is true of all inside-the-quote NMLOs that are posted to the limit order book. For these orders, since the effective spread is measured using the midpoint as of the time of order executability (*see* final 17 CFR 242.600(b)(8)), the effective spread will simply be equal to the signed difference between the limit price and the midpoint at the time of executability, which, for inside-the-quote

Continued

that a reporting entity that consistently handles more aggressively priced midpoint-or-better NMLOs reflects higher effective spreads on average. However, the Commission disagrees that this will make it so that these measures will not be comparable across reporting entities. To the extent that a market center is able to improve upon a midpoint-or-better order's limit price by, *e.g.,* offering better-priced liquidity within the spread and/or by offering the order price improvement, this will be reflected in and result in a better effective spread measure for that market center.

One commenter stated that ''the effective spread is not widely accepted as a meaningful measure of execution quality for NMLOs,'' and ''does not measure a dimension of execution quality that is likely to differ across market centers'' because ''the NBBO midpoint at the moment the NBBO first touches the limit price . . . mechanically must be the same on every market center.'' [1516] The commenter also states that ''[f]or orders submitted outside of the NBBO, the metric essentially amounts to negative one times the quoted spread at the moment the order becomes executable.'' [1517] The Commission agrees that the distance between a NMLO's limit price and the NBBO will be the same across any market center, and also agrees that effective spreads may not be a meaningful measure of execution quality for NMLOs submitted outside of the NBBO for the reason referenced by the commenter. However, since midpoint-or-better NMLOs are able to transact at prices better than their limit prices (*e.g.,* if there is liquidity available inside the quote), effective spreads for midpoint-or-better NMLOs will differ according to a market centers' ability to offer inside-the-quote liquidity or to execute beyond-the-midpoint orders at the midpoint. Therefore, while the Commission agrees with the commenter that effective spreads may not be a meaningful measure of execution quality NMLOs submitted at or outside of the NBBO, there are benefits to including information about effective spreads narrowly for midpoint-or-better NMLOs.

(iii) Percentage Spreads (Effective and Realized)

The adopted amendment requiring reporting entities to report average effective spreads and average realized spreads in percentage terms,[1518] in addition to the preexisting requirement to report them in dollar terms,[1519] will allow market participants to evaluate and compare the actual per-share dollar premium paid (or amount earned) captured by the spread, and use average percentage measures to compare aggregate spreads across broker-dealers that handle different mixes of stocks and/or stocks with significant price volatility.[1520] Since average spread measures represent a per-share cost, the real costs to (or premiums earned by) investors captured by average spread measures can be very different, depending on the stock price.[1521] Percentage average spread measures, on the other hand, will better account for these differences in stock prices.[1522] As different reporting entities handle and/or transact in different mixes of stocks with varying prices, including information about average percentage spreads will make it possible for market participants who want to compare reporting entities' overall spread measures or their spread measures for baskets of stocks to aggregate average spreads for a variety of stocks with varying prices.[1523] This will facilitate a more apples-to-apples comparison of both average effective and average realized spreads across reporting entities. Requiring information on the average percentage effective spread in addition to the average effective spread will facilitate more apples-to-apples comparisons of execution prices across reporting entities, permitting greater competition and resulting in lower effective spreads, *i.e.,* better execution prices.

(iv) Effective Over Quoted Spread (E/Q)

The adopted amendment requiring reporting entities to include information on effective over quoted spreads [1524] will increase market participants' access to information about price improvement. The Commission understands that the effective over quoted spread (E/Q) is a measure often used in industry practice.[1525] Therefore, including this measure will improve upon the accessibility of price improvement information contained in Rule 605 reports by making more readily available a measure that is already used and well understood by industry participants.[1526] This is expected to result in increased competition on the basis of execution prices, which is expected to result in improved execution prices.

Consistent with commenters' suggestions,[1527] the Commission is adopting a spread-weighted average E/Q statistic, which is equivalent to the average effective spread divided by the average quoted spread, expressed as a percentage.[1528] As stated by commenters, a key benefit of spread-weighted average E/Q statistics is that this method of weighting avoids the possibility that a market center could improve its E/Q statistics simply by reallocating its price improvement away from wide-spread stocks and to stocks

NMLOs, will be equivalent to the time of order submission.

[1516] *See* Virtu Letter II at 14.

[1517] *See* Virtu Letter II at 14.

[1518] *See* final 17 CFR 242.605(a)(1)(i)(P), (R), (T), (V), and (X).

[1519] *See* prior 17 CFR 242.605(a)(1)(i)(K) and (a)(1)(ii)(A).

[1520] This was supported by a commenter, who stated that ''percentage-based spread measures would provide additional information at the individual stock level where there is a significant price change during a month.'' Better Markets Letter at 9.

[1521] *See supra* note 1247 and accompanying text for an example showing that the total cost of accumulating the same position in terms of dollar value in two stocks with the same per-share dollar effective spread can differ significantly in terms of total transaction costs if one stock is priced much lower than the other.

[1522] *See* example in *supra* note 1247. While the $250 stock and the $2.50 stock would have the same average effective spread, the average percentage effective spreads of these stocks would be 0.004% and 0.4%, respectively, which indicates that investors would face higher costs from accumulating a position in the $2.50 stock than they would from accumulating an equal-value position in the $250 stock.

[1523] While the main purpose of Rule 605 is to facilitate comparisons across reporting entities on the basis of execution quality within a particular security, the Commission understands that access to aggregated information is useful for market participants. The adopted amendment to require reporting entities to prepare summary reports that aggregate execution quality information for S&P 500 stocks, along with all NMS stocks, will give market participants access to aggregate effective spreads for one commonly used basket of stocks. Meanwhile, per-stock percentage spread information will enhance market participant's ability to aggregate effective spread information across baskets of stocks other than the S&P 500.

[1524] *See* final 17 CFR 242.605(a)(1)(ii)(D); *see also supra* section III.B.4.(d)(2).

[1525] *See, e.g., About Us: Brokerage Built for You,* Vanguard, *available at https://investor.vanguard.com/about-us/brokerage-order-execution-quality* (last visited Feb. 1, 2024, 1:41 p.m.). This was also confirmed by one commenter; *see* Schwab Letter at 3, stating that E/Q is a ''very common metric used within the industry to judge execution quality.''

[1526] Several commenters supported the idea that E/Q is a useful measure of price improvement. *See, e.g.,* Better Markets Letter at 9; Vanguard Letter at 4; Schwab Letter at 31.

[1527] *See, e.g.,* FIF Letter at 23–24; Rule 605 Citadel Letter at 5; Schwab Letter at 31; and Schwab Letter II at 4.

[1528] To see this, consider that the formula for calculating the spread-weighted average E/Q in the case of two trades of size s_1 and s_2 with per-share effective spreads E_1 and E_2 and per-share quoted spreads Q_1 and Q_2, would be $[s_1Q_1/(s_1Q_1 + s_2Q_2) \times (s_1E_1/s_1Q_1)] + [s_2Q_2/(s_1Q_1 + s_2Q_2) \times (s_2E_2/s_2Q_2)]$. This simplifies to $(s_1E_1 + s_2E_2)/(s_1Q_1 + s_2Q_2)$, which is equivalent to the average effective spread divided by the average quoted spread. This result holds irrespective of the number of trades.

with narrower spreads.[1529] To see this, consider a market center that executes 100-share trades in two stocks with very different spreads: Stock A with a quoted spread of $0.02, and Stock B with a quoted spread of $1.00. The market center offers both trades $0.01 of price improvement per share. Using a weighting scheme other than spread-weighting, such as share-weighting,[1530] the market center's average E/Q would be 0.5 * ($0.00/$0.02) + 0.5 * ($0.98/$1.00) = 49%. The market center could lower its average E/Q by simply reallocating the $0.01 of price improvement it offered to Stock B to Stock A; in this case, its average E/Q would be 0.5 * (−$0.02/$0.02) + 0.5 * ($1.00/$1.00) = 0%.[1531] This illustrates that share-weighting would allow a market center to improve its E/Q substantially by reallocating price improvement from wide-spread stocks to narrow-spread stocks, even though the dollar amount of price improvement that it offered to market participants did not change. With spread-weighting, however, the market center's E/Q after offering $0.01 to each stock would be 94.2%; after the reallocation of price improvement from Stock B to Stock A, the spread-weighted average E/Q would also be 94.2%.[1532] In other words, the market center will not be able to improve its E/Q simply by reallocating its dollar price improvement among stocks with different spreads. This will lead to a more accurate measure of execution quality that is better able to facilitate comparisons of E/Q across market centers.

Several commenters suggested that Rule 605 reports not include E/Q and leave it to users of the report to calculate E/Q from other statistics.[1533] In the Proposing Release, the Commission stated that, while E/Q can already be calculated from data that are already required by preexisting Rule 605,[1534] calculating a share-weighted monthly average E/Q as the ratio of average effective spread to average quoted spread produces a noisier E/Q measure than one calculated on a per transaction basis.[1535] The Commission made this statement in reference to the use of this ratio as an approximation of a *share-weighted* measure of E/Q, as was proposed. For spread-weighted measures of E/Q, the formula for aggregating per-transaction measures of E/Q simplifies to precisely the ratio of average effective spreads to average quoted spreads.[1536] Therefore, this issue of the usage of existing Rule 605 data producing a ''noisy'' approximation of E/Q is not relevant to the adopted amendment. Nevertheless, requiring a separate field for E/Q will increase the ability of market participants to access and utilize E/Q.[1537] Furthermore, the Commission agrees with a commenter that adding rows and columns to the Rule 605 report will not substantially increase the costs to data users of processing these reports and storing the relevant data.[1538] The added rows and columns will be part of the same machine-readable file using the same pipe-delimited ASCII format as the existing rows and columns, so data users will not incur any costs associated with converting between formats in order to store and use the newly reported information. Therefore, the marginal cost to data users of including E/Q as an additional column should be minimal. Because of the amended rule requiring the reporting of average quoted spread,[1539] market participants will also be able to compare the spread-weighted average E/Q column directly to the columns containing average quoted spreads and average effective spreads.[1540]

(v) Size Improvement

The adopted amendment expanding Rule 605 reporting requirements to include measures of size improvement will provide market participants with more information about an additional dimension of execution quality that has not been not fully captured by preexisting Rule 605 statistics.[1541] We expect this to be beneficial for evaluating execution of larger-sized orders, as these orders are the most likely to exceed the liquidity available at the best quotes and are therefore in a position to benefit the most from size improvement.

The adopted amendment will require reporting entities to report, for executions of covered shares, a benchmark metric calculated as the consolidated reference quote size, capped at the size of the order at the time of order receipt (or order executability in the case of marketable stop orders and midpoint-or-better orders) (''order size benchmark'').[1542] Subtracting the order size benchmark from number of submitted shares yields ''outsized share count''—a measure of the opportunity to provide size

[1529] *See, e.g.,* FIF Letter at 23–24; Rule 605 Citadel Letter at 5; Schwab Letter at 31; and Schwab Letter II at 4.

[1530] The formula for calculating the share-weighted average E/Q in the case of two trades of sizes s_1 and s_2, with per-share effective spreads E_1 and E_2 and per-share quoted spreads Q_1 and Q_2, would be $[s_1/(s_1 + s_2) \times (E_1/Q_1)] + [s_2/(s_1 + s_2) \times (E_2/Q_2)]$.

[1531] A lower E/Q corresponds to a better execution quality, as the trader whose order is being executed is paying a smaller percentage of the spread.

[1532] *See supra* note 1528 for the formula for calculating spread-weighted E/Q in the case of two trades.

[1533] *See* FIF Letter at 20–21 (stating that for marketable order types, it is not necessary to include E/Q in the detailed reports required by Rule 605(a)(1) because E/Q can be derived from other data that are already included and these data, specifically, are found in the price improvement, price dis-improvement, and effective spread statistics); Schwab Letter at 31 (suggesting that the reports include effective and quoted spread and then allow individuals to compute E/Q).

[1534] *See* Proposing Release, 88 FR 3786 at 3817, n.399 (Jan. 20, 2023): ''[Share-weighted] average quoted spread can be derived on a per symbol basis by adding average effective spread and double the amount of total average per share price improvement or dis-improvement (*i.e.,* amount of price improvement times price improved share count, less amount of price dis-improvement times price dis-improved share count, divided by total number of executed shares).''

[1535] To see this, consider a market center that, in a given month, executes two orders of sizes s_1 and s_2, with per-share effective spreads E_1 and E_2 and per-share quoted spreads Q_1 and Q_2. The formula for the share-weighted average E/Q is given in *supra* note 1530. Approximating the share-weighted average E/Q from share-weighted average effective and quoted spreads would yield $[s_1/(s_1\ Q_1 + s_2\ Q_2) \times E_1] + [s_2/(s_1\ Q_1 + s_2\ Q_2) \times E_2]$.

[1536] *See supra* note 1528 for the formula for calculating spread-weighted E/Q in the case of two trades.

[1537] *See supra* section III.B.4.d)(2) for further discussion.

[1538] *See supra* note 1496 and corresponding text for further discussion.

[1539] *See* final 17 CFR 242.605(a)(1)(ii)(A).

[1540] *See, e.g.,* Professor Spatt et al. Letter, stating that ''quoted spreads, for example, are critical for understanding and weighting both effective spreads and EFQ ratios.''

[1541] This was also supported by one commenter, who stated that ''[i]ncluding size improvement metrics will provide market participants with important information about an additional dimension of execution quality that is not currently captured by current Rule 605 statistics.'' Rule 605 Citadel Letter at 11. Another commenter stated that, along with other enhancements, the inclusion of the size improvement metric would ''improve order execution information available for market participants to make trading and order routing decisions . . .'' SIFMA Letter II at 25.

[1542] *See* final 17 CFR 242.605(a)(1)(ii)(R). As discussed in *supra* section III.B.4.e)(2), this metric is designed to capture whether the depth available at the best market prices is sufficient to fully execute against a given order, or whether the order would need to walk the book to fully execute. Since size improvement is measured using NBBO depth at the time of order receipt, a marketable limit order that partially executes, is posted to the limit order book, and then fully executes later, will be reflected in size improvement statistics. For example, assume that a market center receives a 500-share marketable limit order when there are 300 shares available at the NBBO. The market center executes 300 of the 500 shares against the available depth and posts the remaining 200 shares to the limit order book, which becomes the new NBBO. A market order subsequently executes against those 200 shares. Since size improvement is based on order receipt time, the market center would record an order size benchmark of 300, 500 shares executed at the NBBO or better, and thus a size-improved outsized share count of 200 shares.

improvement.[1543] In response to a commenter, Rule 605 reports as amended will also include a size improvement metric that will measure the level of size improvement in those instances in which the order presents an opportunity for size improvement (the ''size improved outsized shares'').[1544] Dividing size-improved outsized shares by outsized share count yields the number of shares that receive size improvement (on orders in which size improvement is possible) as a fraction of the number of shares for which there is an opportunity to provide size improvement.

If information about size improvement were already captured by preexisting Rule 605 statistics, the addition of the order size benchmark and information about size improved outsized shares would not increase transparency. To examine the extent to which size improvement measures calculated using these metrics will contain information that is different from measures required by preexisting Rule 605, data from the Tick Size Pilot B.II Market and Marketable Limit Order dataset [1545] were analyzed to calculate the average correlation [1546] between price improvement, effective spreads, and the size improved outsized shares divided by the outsized share count (''outsized size improvement rate'').[1547] As national securities exchanges and off-exchange market centers differ in the extent to which they can offer size and price improvement, the Commission performed this analysis separately for these two different types of market centers.

[1543] Outsized Share Count = Number of Submitted Shares − Order Size Benchmark. Continuing the example from *supra* note 1557, while both Market Centers A and B would show a size improvement share count of 0, Market Center A will show an outsized share count of 500 − 500 = 0, while Market Center B will show an outsized share count of 500 − 300 = 200.

[1544] *See* final 17 CFR 242.605(a)(1)(ii)(S), requiring the reporting of ''the sum of, for each execution of a covered order, the greater of: the total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark, or zero.'' The ''total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark'' (''net size improvement'') will only be a strictly positive number for those orders that are both eligible to receive size improve and receive size improvement, and thus is equivalent to a measure of shares that are eligible to and that received size improvement. To see this, consider that an order (''Order A'') whose size is less than the available NBBO depth will have a net size improvement of 0, an order (''Order B'') that is not executed despite available depth (or is executed as prices worse than the NBBO) will have a negative net size improvement, and an order (''Order C'') whose size exceeds the available NBBO depth by 300 shares and receives price improvement on those 300 shares will have a net size improvement of 300 shares. Capping the net size improvement for these three orders at zero and then summing then would only capture the net size improvement for that order that was eligible to receive size improvement and that received size improvement, *i.e.,* 0 + 0 + 300 shares. A substantively similar measure (''the number (or percentage) of shares within the outsized orders that received size improvement (*i.e.,* were executed at or better than the NBBO price, in excess of the amount of aggregate displayed liquidity at the NBBO)'') was suggested by a commenter. *See* Virtu Letter at 10. To the extent that the metric suggested by the commenter could capture size dis-improvement (*i.e.,* negative values of net size improvement), this metric may not be equivalent to the size improved outsized share count.

[1545] *See* Tick Size Pilot Plan, *supra* note 1115. This dataset contains information for approximately 2,400 small cap stocks for a period from Apr. 2016 to Mar. 2019. Orders with special handling codes are discarded, as are orders marked as short sales (''SS''). As the Tick Size Pilot collected data only for small cap stocks, these execution times are not necessarily representative of all stocks. The Commission limited this analysis to a randomly selected sample of 100 stocks and for the time period of Mar. 2019. This dataset was then merged with MIDAS data to obtain the consolidated depth available at the NBBO at the time of the market and marketable limit order submissions, along with data on odd-lots and consolidated volume at prices outside of the NBBO. This analysis uses data from prior to the implementation of the MDI Rules and the specific numbers may be different following the implementation of the MDI Rules. In particular, for certain stocks, the NBBO quoted spread is expected to narrow, the liquidity available at the NBBO may decrease, and the NBBO midpoint may change, though the Commission is uncertain of the direction of this effect. This may impact statistics that are based on these values, including measures of price and size improvement and effective spreads. *See supra* section IX.C.1.c)(2). However, it is unclear whether or how these effects would impact the correlations between these measures documented in this analysis.

[1546] Correlation is calculated using the Pearson correlation coefficient, which measures the linear correlation between two sets of data, ranging from −1 to 1, with −1 representing perfect negative correlation and 1 representing perfect positive correlation. To construct a measure of average correlation, the Pearson correlation coefficient is first calculated for each pair of execution quality metrics, for each market center-stock combination. Then value-weighted average correlation coefficient across all stocks for each market center is constructed, using dollar volume as weights. The resulting correlation coefficients are then averaged across market centers using an equal-weighted average.

[1547] *See* final 17 CFR 242.605(a)(1)(ii)(S), requiring the reporting of the greater of the net size improvement rate and zero. *See also supra* note 1544. The size improved outsized shares are divided by the outsized share count to control for differences in size improvement opportunities at different market centers. For example, if Market Centers A and B both have 200,000 size improved outsized share counts, but Market Center A has an outsized share count of 800,000, and Market Center B has an outsized share count of 1,800,000, Market Center A will be offering a higher rate of size improvement since it had fewer opportunities to provide size improvement. To capture this, the size improved outsized share count is divided by the outsized share count, such that Market Center A will have an outsized size improvement rate of 200,000/800,000 = 25% and Exchange B will have an outsized size improvement rate of 200,000/1,800,000 = 11%. This difference recognizes that Exchange A and Exchange B provided size improvement to the same number of shares, but Exchange A gave size improvement to a larger percentage of its orders for which there was an opportunity to provide size improvement.

Results are presented in Table 8 [1548] and show that, for both national securities exchanges and off-exchange market centers, effective spreads are modestly (negatively) correlated with price improvement, confirming that effective spreads contain some of the same information as price improvement measures. However, this correlation is nearly zero for the outsized size improvement rate, implying that effective spreads are a poor measure of size improvement.

Table 8: Average Correlation between Measures of Price and Size Improvement

Variables	National Securities Exchanges	Off-Exchange Market Centers
Price Improvement and Effective Spreads	-0.257	-0.205
Outsized Size Improvement Rate and Effective Spreads	-0.001	0.026
Price Improvement and Outsized Size Improvement Rate	0.024	0.022

This table presents correlations between three measures of price improvement and size improvement: price improvement, calculated as the signed difference between the execution price and the NBBO; the effective spread, calculated as twice the signed difference between the execution price and the NBBO midpoint; and the outsized size improvement rate, calculated as size improved outsized shares divided by the outsized share count (see supra note 1547 and accompanying text for a detailed description of the latter two measures). This analysis uses data from the Tick Size Pilot B.II Market and Marketable Limit Order dataset. See supra note 1545 for dataset description and supra note 1546 for methodology. To construct a measure of average correlation, the Pearson correlation coefficient is first calculated for each pair of execution quality metrics, for each market center-stock combination. Then value-weighted average correlation coefficient across all stocks for each market center is constructed, using dollar volume as weights. The resulting correlation coefficients are then averaged across market centers using an equal-weighted average. This analysis uses data from prior to the implementation of the MDI Rules and results may be different following the implementation of the MDI Rules. See supra note 1545 and section IX.C.1.c)(2).

The correlation between price improvement and the outsized size improvement rate is comparatively low. The fact that price improvement and size improvement metrics are not strongly correlated implies that each of these measures to some degree conveys different information about execution quality. Therefore, including the order size benchmark and size improved outsized shares into Rule 605 reporting requirements will provide market participants with more information about an additional dimension of execution quality that was not fully captured by Rule 605 statistics prior to these amendments.

The Commission expects that these amendments will improve execution quality in terms of size improvement by increasing the extent to which market centers and broker-dealers compete with one another on the basis of their ability to offer size improvement. In order to attract broker-dealer order flow, market centers will be incentivized to compete on the basis of size improvement, for example by executing orders against their own inventory at or better than the NBBO, or offering additional incentives to attract hidden liquidity priced at or better than the NBBO. Investors that particularly value the ability of reporting entities to offer size improvement, such as investors trading in larger order sizes, will be able to use this metric to discern which reporting entity might offer better size improvement to their orders, which will allow them to make better routing decisions and obtain increased size improvement as a result.[1549] As a result, competition on the basis of size improvement among reporting entities is expected to increase in order to attract these customers and their orders.

One commenter stated that ''[to] accurately identify size improvement not only would proprietary depth of book feeds be required, the statistic would be misleading as it would not reflect . . . top of book across public quotes, nor would it reflect hidden or mid-point priced orders which are extremely prevalent in today's market if sole reliance was on the SIP.'' [1550] The Commission acknowledges that the adopted measures of size improvement in some cases will not be as informative as a measure that incorporates full depth-of-book information.[1551] The Commission also acknowledges that it might not reflect top of book across

[1548] This analysis has been updated from the Proposing Release; *see* Proposing Release, 88 FR 3786 at 3871 (Jan. 20, 2023). In the Proposing Release, the measure of size improvement used in the analysis was constructed as the net size improvement divided by the order size benchmark. In response to commenters, the measure of size improvement used in the analysis in Table 8 has been updated in two ways. First, the size improvement measure has been updated to include outsized share count in the denominator, rather than the order size benchmark. As pointed out by commenters, since the order size benchmark contains information about the volumes of orders that do not have an opportunity to receive size improvement, dividing size improvement metrics by this number will dilute measures of size improvement. *See supra* note 1555 and corresponding text for further discussion. Second, the size improvement measure has been updated to use the size improved outsized share count in the numerator, rather than net size improvement. This is because net size improvement contains information about size dis-improvement, which can be negative even for orders that do not have an opportunity to receive size improvement. *See supra* note 1544 for further discussion. Using the size improved outsized share count focuses the analysis on those orders that are eligible to receive size improvement and receive size improvement. The Commission is amending Rule 605 to include the size improved outsized share count in response to a commenter, who suggested a similar measure. *See* Virtu Letter at 10; *see also* supra note 1544. However, both size improvement measures lead to similar average correlations, and thus these changes did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that price improvement and size improvement each convey different information about execution quality.

[1549] *See supra* note 1257 for an example of how a size improvement measure might be useful for a trader when deciding between different market centers.

[1550] *See* Healthy Markets Letter at 18.

[1551] *See infra* sections IX.E.3.d)(1) and IX.E.3.d)(2) for a discussion of two reasonable alternatives related to including dollar size improvement relative to full depth-of-book in amended Rule 605 reports.

public quotes,[1552] or reflect hidden liquidity. However, the adopted measures will not be misleading as stated by the commenter,[1553] but will be useful for investors for the reasons given above. For example, size improvement statistics for exchanges will account for hidden liquidity, and therefore, by comparing size improvement across exchange and off-exchange market centers, investors could account for the effects of hidden liquidity.[1554]

One commenter stated that the proposed size improvement benchmark metric ''is not a useful measure of the actual size improvement,'' because the benchmark measure will ''include all orders in the calculation, even when there is no opportunity to provide size improvement,'' which ''dilutes the amount and obfuscates the value of size improvement provided when the need for size improvement actually exists.'' [1555] The commenter suggested that the Commission consider requiring the reporting of several additional metrics that are ''not affected by orders in which there was no need to provide size improvement.'' [1556]

The Commission agrees that whether there was an opportunity to provide size improvement is an important aspect of an analysis of size improvement.[1557] The Commission is adopting a metric (the size-improved outsized shares) that is substantively similar to the commenter's suggested metric, namely the number of shares within outsized orders that receive size improvement.[1558] The Commission observes further that the opportunity to provide size improvement can be calculated using a combination of two metrics that will be available in the amended reports: number of submitted shares and benchmark order size. Subtracting the order size benchmark from number of submitted shares yields ''outsized share count''—a measure of the opportunity to provide size improvement.[1559] Because the benchmark order size is capped at the order size, and thus will be equal to zero for orders sized below available NBBO depth, the outsized share count will be the same number regardless of whether it includes all orders or only all outsized orders. Dividing size-improved outsized shares by outsized share count yields the number of shares that receive size improvement (on orders in which size improvement is possible) as a fraction of the number of shares for which there is an opportunity to provide size improvement. It is thus a measure of size improvement diluted by orders for which there were no opportunities to provide size improvement.

Another commenter was critical of the benefits of the proposed size improvement measure because ''it would indicate only whether and the number of shares for which size improvement was achieved,'' and ''it would not indicate whether and to what extent such size improvement increased the amount of price improvement.'' [1560] The Commission acknowledges that the measures of size improvement included in the amended rule will measure size improvement in terms of numbers of shares, and not in terms of a dollar value of price improvement resulting from size improvement. The Commission considered but is not adopting several alternatives that would measure size improvement in terms of a dollar amount of price improvement.[1561] Market participants will be able to assess some information about price improvement from the price improvement statistics included in the amended reports, though these measures of price improvement will not consider prices and depth beyond those at or inside of the NBBO.[1562]

(vi) Riskless Principal Trades

The adopted amendment requiring that market centers include riskless principal trades in the category of trades executed away from the market center [1563] will increase transparency about internalization by wholesalers, as information on the extent to which wholesalers internalize order flow has been obscured by the preexisting Rule 605 requirement to include riskless principal trades into the category of trades executed at, rather than away from, the market center.[1564] Market participants will be more informed about potential differences in execution quality between wholesalers that largely internalize order flow as compared to those whose orders are subject to competition from other interested parties quoting on external market centers.

One commenter stated that the statement in the Proposing Release that ''execution quality statistics would be more informative to market participants'' [1565] as a result of the re-classification of riskless principal trades was ''misleading,'' because ''[t]he execution quality metrics reported under Rule 605 correctly take into account all orders routed to a wholesale broker-dealer (irrespective of where execution occurs)'' and ''[t]his would not change under the Proposal.'' [1566] The Commission agrees that the calculation of execution quality metrics takes into account both executions at and away from the reporting center, and that this will not change after the re-classification of riskless principal trades. However, as the Commission stated in the Proposing Release, requiring the separate reporting of

[1552] For example, if Exchange A's top-of-book is quoting $10.00–$10.01 and sets the NBBO, and Exchange B's top-of-book is quoting $9.99–$10.02, the adopted size improvement measures will only include volume quoting at $10.00–$10.01. Depth quoted at $9.99–$10.02, while protected, will not be incorporated into the adopted size improvement metrics. *See* 17 CFR 242.600(b)(70) for the definition of a protected bid and protected offer.

[1553] *See* Healthy Markets Letter at 18.

[1554] Since information about hidden liquidity is not publicly available, even a size improvement measure that incorporate full depth-of-book information would not incorporate information about hidden liquidity. The Commission acknowledges that, to the extent that including measures of size improvement in Rule 605 reports incentivizes hidden liquidity at the cost of displayed orders, this represents a potential cost of the amendments, though the Commission does not believe that this scenario is likely. See infra section IX.D.2.b)(3) for a full discussion.

[1555] *See* Virtu Letter at 10.

[1556] *See* Virtu Letter at 10.

[1557] To see this, consider two market centers, A and B, that both receive a market sell order for 500 shares. When Market Center A receives the order, there are 600 shares available at the NBB, and Market Center A executes the entire 500-share order at the NBB. Meanwhile, while Market Center B receives the order, there are 300 shares available at the NBB. Market Center B executes 300 of the 500 shares at the NBB, and the remaining 200 shares walk the book. Both market centers would similarly show a size improvement share count of 0. However, this would not capture the fact that Market Center A never had the opportunity to provide size improvement (because the NBB depth was sufficient to fill the order), and Market Center B did not provide size improvement, though it had the opportunity to do so.

[1558] *See* Virtu Letter at 10, stating ''the number (or percentage) of shares within the outsized orders that received size improvement (*i.e.,* were executed at or better than the NBBO price, in excess of the amount of aggregate displayed liquidity at the NBBO).'' This measure is substantively similar to the measure of size improved outsized shares included in the amended rule. *See* final 17 CFR 242.605(a)(1)(ii)(S).

[1559] Outsized Share Count = Number of Submitted Shares − Order Size Benchmark. Continuing the example from *supra* note 1557, while both Market Centers A and B will show a size improvement share count of 0, Market Center A will show an outsized share count of 500 − 500 = 0, while Market Center B will show an outsized share count of 500 − 300 = 200.

[1560] *See* CCMR Letter at 12.

[1561] *See infra* sections IX.E.3.d)(1) and IX.E.3.d)(2).

[1562] This includes, for example, price improvement relative to the NBBO, price improvement relative to the best displayed price, and the effective spread. *See* final 17 CFR 242.605(a)(ii)(B), (F), and (M).

[1563] *See* final 17 CFR 242.605(a)(1)(i)(F).

[1564] *See supra* section IX.C.3.c)(10) for a discussion of how classifying riskless principal trades in the category of executions taking place at the market center may have obscured the extent to which wholesalers internalize order flow prior to these amendments.

[1565] *See* Proposing Release, 88 FR 3786 at 3819 (Jan. 20, 2023).

[1566] *See* Rule 605 Citadel Letter at 10.

riskless principal transactions from executions at the market center will be useful ''when interpreting and comparing information about wholesalers' execution quality.'' [1567] For example, if market participants observe a persistent difference in execution quality between wholesalers that largely internalize order flow and wholesalers that execute most on a riskless principal basis, they may surmise that this difference in execution quality is driven at least in part by the levels of internalization. In this way, execution quality statistics will be more informative.

(vii) Price Improvement

The amendment to Rule 605 requiring, for marketable order types (*i.e.,* market, marketable limit, and marketable IOC orders), as well as for midpoint-or-better limit orders, reporting entities to disclose price improvement statistics using the best available displayed price as the benchmark [1568] will give market participants access to price improvement information relative to a benchmark price that more accurately reflects liquidity available in the market. For example, if a market center internalizes an order with $0.05 of price improvement relative to the NBBO, but odd-lots are available on another market center at prices that are $0.10 better than the NBBO, this measure will reflect a price dis-improvement of $0.05. This will indicate that the investor could have received a better price if the market center had routed the order to execute against the available odd-lot liquidity. Thus, market participants (including broker-dealers) will be able to identify those market centers that execute orders at prices better than the best available displayed price, taking into account all available displayed liquidity.[1569] This will promote incentives for reporting entities to seek out or offer price improvement relative to the best displayed price, taking into account all available displayed liquidity (including odd-lots). Continuing the previous example, a market center internalizing an order will not be able to post a positive price improvement metric when a better-priced odd-lot was available at another market center.[1570] Instead, the market center may be incentivized to increase its offering of price improvement from $0.05 above the NBBO to $0.15 above the NBBO (*i.e.,* $0.05 above the best displayed price), in order to maintain the same level of price improvement in its Rule 605 report.

Multiple commenters supported including a measure of price improvement relative to the best displayed price.[1571] However, several commenters stated that the measure would be ''misleading,'' particularly because it does not account for the size available at the best displayed price.[1572] The Commission recognizes that an odd-lot price that is better than the NBBO may not reflect sufficient quantity to execute certain orders, particularly larger-sized orders, and, as a result, price improvement relative to the best displayed price will be more relevant in some cases and for some orders than for others.[1573] However, the Commission disagrees that this will result in the measure being misleading. First, since orders will be grouped in notional order size buckets and broken out separately into fractional, odd-lot, and round lot orders, Rule 605 reports will present the price improvement statistics related to best available displayed price in a format that will make it possible to focus in on those smaller-sized orders for which the measure is most informative.[1574] Second, in cases where the depth available at the best displayed price is insufficient to fill all or most orders, such that executions relative to the best displayed price reflect price dis-improvement, this will be similarly true for all reporting entities. If the reporting entity does execute against the depth that is available, and/or otherwise achieves price improvement for its handled orders, the reporting entity may still reflect a negative value for price improvement relative to the best displayed price, but less negative than that of a reporting entity that did not offer any price improvement. Thus, to the extent that Rule 605 reports will primarily be used by market participants to compare execution quality across market centers and across broker-dealers, a measure of price improvement relative to the best displayed price will not be misleading and will still allow market participants to identify reporting entities offering better execution quality, in terms of which reporting entity has offered a lower amount of price dis-improvement relative to the best displayed price (*i.e.,* a less negative number).[1575]

Other commenters stated that including two sets of price improvement metrics using two different reference points would be confusing for retail investors,[1576] and that including price improvement relative to the best displayed price would ''add unnecessary complexity to the report.'' [1577] The Commission is mindful that an increase in the complexity of Rule 605 reports may make it difficult for individual investors to review and digest the detailed reports. However, it is also important that market participants have access to a variety of detailed execution quality information to meet their various purposes. Statistics on price improvement relative to the best available displayed price will provide a useful data point for market participants to consider, in addition to statistics on price improvement relative

[1567] *See* Proposing Release, 88 FR 3786 at 3858 (Jan. 20, 2023).

[1568] *See* final 17 CFR 242.600(b)(14) (defining the ''best available displayed price'') and 242.605(a)(1)(ii)(M) through (Q); *see also supra* section III.B.4.g)(2) for further discussion of these amendments.

[1569] If only the NBBO is used as the benchmark for the adopted price improvement statistic relative to the best available displayed price, because, for example, odd-lots inside the NBBO are not available or because information about the best odd-lot orders available in the market inside the NBBO is not or is not yet available in consolidated market data, then these additional price improvement statistics will be the same as the price improvement statistics currently included in Rule 605 and will not have significant economic effects. *See supra* note 719.

[1570] One academic study found that incorporating information about the best odd-lot price into the NBBO for the purposes of calculating price improvement decreased estimates of price improvement by 2.44 percentage points. *See* Battalio & Jennings, *supra* note 1253, at 17.

[1571] *See, e.g.,* Better Markets Letter at 9; Angel Letter at 3.

[1572] *See, e.g.,* SIFMA Letter at 32; Schwab Letter II at 6; Rule 605 Citadel Letter at 6; Robinhood Letter at 47.

[1573] For example, price improvement relative to the best displayed price will typically always be relevant for fractional orders less than one share, and may often be relevant for odd-lots, since it is more likely that odd-lot volume would equal or exceed depth at the best displayed price. Price improvement relative to the best displayed price may also be relevant for round lots if aggregated odd-lot volume across market centers is sufficient to fill the order, if there is hidden liquidity available at the best displayed price, or if market centers such as wholesalers take the best displayed price into account when actively offering price improvement when executing orders against its own inventory.

[1574] *See supra* section III.B.4.g)(2) for further discussion.

[1575] For example, consider an extreme case in which the volume available at the best displayed price is only one share. Unless it is a fractional order, in all likelihood a market center will not be able to execute sufficient volume at the best displayed price, and thus would always reflect dis-improvement relative to the best displayed price (unless it was able to achieve price improvement via other means). For example, assuming that the best displayed price is $0.01 better than the NBBO, for a market center that was able to execute a 100-share order against that 1 share, its share-weighted average price dis-improvement relative to the best displayed price would be −$0.009, compared to −$0.01 for a market center that executed an entire 100-share order at the NBBO.

[1576] *See* Robinhood Letter at 47. Similarly, another commenter stated that ''an odd-lot NBBO creates ambiguity.'' Data Boiler Letter at 28.

[1577] *See* Schwab Letter II at 6.

to the NBBO.[1578] Furthermore, it is likely that many individual investors will not face this issue as the Commission expects that many will exclusively make use of Rule 605 summary reports, which will only include one measure of price improvement, *i.e.,* price improvement relative to the NBBO.[1579]

Commenters were also critical of the inclusion of price improvement information for non-marketable limit orders, because ''price improvement is only a relevant statistic for marketable group orders'' [1580] and because, for beyond-the-midpoint orders, ''the fact that the limit order's price between the midpoint and far touch (exclusive) is a variable controlled by the individual investor—and is responsible for some of its 'price improvement.' '' [1581] The Commission agrees that some of the price improvement associated with non-marketable limit orders will be driven by the order's limit price, which is outside of a reporting entities' control. In Rule 605 as amended, price improvement will be required to be reported only for one particular type of non-marketable limit order, *i.e.,* midpoint-or-better NMLOs. These NMLOs in particular can execute at prices better than their limit price, particularly if they have a significant likelihood to immediately execute against hidden or odd-lot liquidity inside the spread.[1582] Therefore, it is not always the case that price improvement statistics for non-marketable limit order will be a function of the order's limit price alone, but will also reflect a reporting entities' ability to offer inside-the-quote liquidity that is priced better than the order's limit price. This will particularly be the case for midpoint-or-better NMLOs. Therefore, price improvement statistics for this order type will benefit consumers of Rule 605 reports.

(viii) Relative Fill Rates

The adopted amendment requiring reporting entities to report the number of shares that executed regular way at prices that could have filled an executable NMLO while the order was in force will promote transparency regarding differences in the execution probabilities of NMLOs between reporting entities. This will increase the ability of investors and their broker-dealers to route orders to those reporting entities with higher fill rates of executable NMLOs (including limit orders submitted with stop prices and at-and-beyond-the-midpoint NMLOs). Market participants will have access to information about the extent to which a NMLO did not execute or executed after a large number of shares executed elsewhere in the market, despite the fact that the NMLO was executable. In order to attract this order flow, reporting entities will need to improve their ability to achieve executions for executable NMLOs. Market centers can achieve higher fill rates for NMLOs, for example, by reducing access fees to encourage more marketable orders to execute against resting NMLOs, or by discouraging excessive submissions and cancellations of NMLOs, for example by instituting or raising excessive messaging fees.[1583] Broker-dealers can achieve higher fill rates for NMLOs by improving their order routing methods and by routing orders to market centers that achieve higher fill rates for NMLOs. Reporting entities will be required to report the cumulative number of shares both across all market centers, as well as only across national securities exchanges. The Commission agrees with a commenter that information about the cumulative number of shares executed regular way on national securities exchanges will be useful for market participants because it will exclude liquidity that potentially was not accessible to a reporting entity.[1584]

Furthermore, the adopted amendment requiring the reporting of the number of orders that received either a complete or partial fill will provide important additional information about the nature of a market center or broker-dealer's NMLO and stop order executions—*e.g.,* whether a high executed cumulative count represents, on average, larger execution sizes or a higher count of orders receiving executions.[1585]

(3) Improvements to Accessibility

Execution quality will also increase as a result of the adopted amendment requiring reporting entities to prepare human-readable summary reports,[1586] as market participants will be better able to use information from Rule 605 reports to compare execution quality across reporting entities and competition among reporting entities on the basis of execution quality will increase as a result. The data generated under Rule 605 are complex, and the raw data may be difficult for some market participants to interpret and aggregate. Specifically individual investors, who may be less likely to have access to the resources to retrieve and process the raw data in Rule 605 reports, will be better able to access information from Rule 605 reports to compare execution quality across larger broker-dealers, which will increase the extent to which these broker-dealers will need to compete on the basis of execution quality to attract and retain these customers.

The usefulness of summary reports particularly for individual investors was supported by several commenters.[1587] However, other commenters stated that summary reports could be misleading if they do not allow investors to control for potential differences in reporting entities' order flow characteristics when assessing execution quality.[1588] The Commission agrees that differences in execution quality can be driven by differences between reporting entities other than differences in their skills at handling and/or executing orders, such as differences in the characteristics of their order flow,[1589] and thus recognizes that it is important to strike a balance between sufficient aggregation of orders to produce statistics that are meaningful and sufficient differentiation of orders to facilitate fair comparisons of execution quality across reporting

[1578] *See supra* section III.B.4.g)(2) for further discussion.

[1579] *See supra* section III.B.4.g)(2) for further discussion.

[1580] *See* FIF Letter at 21.

[1581] *See* Schwab Letter II at 7. Though the commenter only mentioned the importance of an order's limit price in the context of price improvement for beyond-the-midpoint orders, the Commission recognizes that the same could be said for other types of non-marketable limit orders.

[1582] *See, e.g.,* results from Table 4, showing that a larger percentage of these orders are submitted with IOC designations.

[1583] *See, e.g., Price List—Trading Connectivity,* NASDAQ, *available at https://www.nasdaqtrader.com/trader.aspx?id=pricelisttrading2* (last visited Feb. 1, 2024, 3:52 p.m.), which describes how one market center charges its members a penalty for exceeding a certain ''Weighted Order-to-Trade Ratio.''

[1584] *See* FIF Letter at 22. For example, there are difference in fair access rules between national securities exchanges and other trading venues, such as ATSs.

[1585] For example, say that a reporting entity discloses in its Rule 605 reports that it received 100 orders sized 100 round lots or greater in a stock with a 100-share round lot, and that these orders had a cumulative number of shares of 1,000,000, and furthermore that it executed 990,000 of those shares. Information on the number of complete or partial fills would help to clarify whether the reporting entity, *e.g.,* executed 99 orders of 10,000 shares each, or a single order of 990,000 shares.

[1586] *See* final 17 CFR 242.605(a)(2).

[1587] *See, e.g.,* Vanguard Letter at 4; Nasdaq Letter at 46; Fidelity Letter at 1; NASAA Letter at 6.

[1588] *See, e.g.,* Virtu Letter at 6; Rule 605 Citadel Letter at 4. Another commenter, while agreeing with the Commission's intent of ''enhanced disclosure,'' was critical of the summary report as proposed, stating that it ''fails to allow for an apples-to-apples comparison, which directly subverts the Commission's stated goals.'' Schwab Letter at 31.

[1589] *See supra* note 984 for an example of how differences in order flow characteristics can impact inferences about execution quality.

entities.[1590] The statistics required in the summary reports will strike this balance. First, market participants will be able to control for the average order sizes handled by a particular market center in several ways. For example, the summary reports will allow market participants to examine execution quality statistics separately for different notional order size buckets,[1591] as well as to control for the average notional order size within each order size bucket.[1592] Second, information about realized spreads will allow market participants to control for differences in reporting entities' order handling practices during times of market stress or high adverse selection.[1593]

In a change from the proposal, the amended rules require the use of CSV and PDF formats for the summary report, rather than XML and PDF formats as proposed.[1594] One commenter recommended the use of CSV rather than XML for the summary reports, stating that CSV ''would allow investors to compare summary data across firms more readily.'' [1595] Like XML and PDF, CSV is an ''open standard,'' a term that is generally applied to technological specifications that are widely available to the public, royalty-free, at no cost. Many investors and other members of the public may find a CSV file format preferable to an XML file format because the data can be more readily viewed and analyzed in widely used spreadsheet applications. Replacing the proposed XML format requirement with a CSV format requirement will likely facilitate use of the summary reports, thereby heightening the transparency benefits that the summary reports will create.[1596]

Unlike the CSV format, the PDF format is generally meant for a human reader rather than for a machine reader. Requiring market centers and broker-dealers to post a PDF version of the summary report will allow an individual human reader to open and read a summary report without having to download the data into a spreadsheet or other analytical program. This will make the information in the summary reports accessible to a broader range of individual users. In addition, because PDF documents are presented consistently across websites, operating systems, and applications, the PDF requirement will provide individual human readers with more comparable summary reports and facilitate their understanding of the reported summary execution statistics.

Requiring market centers to post summary reports in two formats (PDF and CSV) will permit market participants to use the summary reports for a variety of different purposes. For example, a retail investor could use the PDF version of a market center's latest summary report to easily identify the percentage of shares executed at the quote or better at that market center. By contrast, a broker-dealer assessing its own order routing practices could download the CSV versions of 10 different market centers' summary reports in each of the preceding 12 months, and identify which of those market centers had consistent month-to-month increases in percentage of shares executed at the quote over that period.

(c) Other Benefits From Increased Competition

To the extent that these amendments to Rule 605 increase incentives for reporting entities to compete in areas other than improved execution quality, customers may benefit from improvements that are not directly related to execution quality, such as lower fees, higher rebates, new products or functionalities, or better customer service. Improvements in areas other than execution quality because of the increase in competition among reporting entities may be either complementary to or a substitute for improvements in execution quality. Investors are more likely to see an overall benefit from these amendments to the extent that these improvements are complementary. Furthermore, to the extent that these amendments increase competition in related markets, market participants may benefit from lower costs and/or improved quality in these markets. For example, the quality of TCA reports may improve if their publishers need to offer better products to compete with the publicly available data under Rule 605.

(d) Potential Limitations to Benefits

There are certain factors, however, that could limit the benefits of these amendments for transparency and competition, which could limit the effectiveness of these amendments in improving execution quality.

(1) Effect on Smaller Broker-Dealers

The expanded scope of Rule 605 includes only larger broker-dealers. Hence, investors, as they gain transparency into the execution at these larger broker-dealers, may route more transactions to these broker-dealers at the expense of smaller broker-dealers who are not included in the scope of Rule 605. That said, smaller broker-dealers may gain a competitive advantage relative to larger broker-dealers, as they will not incur the compliance costs of preparing Rule 605 reports. Also, increased levels of competition among larger broker-dealers may spill over to affect smaller broker-dealers, as their customers may expect more transparency, and smaller broker-dealers will continue to be able to publish ad hoc execution quality reports that focus on execution quality metrics in which they perform well.[1597] Altogether, the cumulative effects on smaller broker-dealers, who handle only a fraction of all customer accounts and a minority of orders,[1598] and whose customers may be more likely to be institutional investors (who have alternative sources of information about their broker-dealers' execution quality) [1599] are likely to be small, and limiting the scope of Rule 605 to larger broker-dealers is designed to achieve the competitive effects discussed in prior sections.[1600]

One commenter stated that smaller broker-dealers could be disadvantaged by not being required to prepare Rule 605 reports, which could lead to the

[1590] *See, e.g.,* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75423 (Dec. 1, 2000).

[1591] *See* final 17 CFR 242.605(a)(2).

[1592] *See* final 17 CFR 242.605(a)(2)(ii). The inclusion of average notional order size in the summary reports was suggested by a commenter, who stated that, ''since a broker's average order size can impact its average execution quality metrics, providing this transparency to users of the Summary Report will mitigate the potential for misinterpretation of the data and better inform individual investors when they compare brokers.'' Schwab Letter II at 3.

[1593] As suggested by commenters, information about average realized spreads may also allow market participants to control for potential differences in order flow characteristics. *See, e.g.,* FIF Letter at 32; Schwab Letter II at 3. One commenter specifically mentioned the extent to which market participants classify order flow as informed and the size of an order relative to the ADV of a stock as examples of such order characteristics. *See* FIF Letter at 32.

[1594] *See* final 17 CFR 242.605(a)(2).

[1595] *See* FIF letter at 5, 32.

[1596] The efficiency of processing and analyzing summary reports may further increase if a third-party determined to provide a centralized location from which market participants can retrieve all summary reports. *See, e.g.,* Regulatory Notice.

[1597] These information asymmetries are described in more detail in *supra* section IX.C.1.a).

[1598] *See infra* section IX.E.1.a) for a discussion of an analysis showing that broker-dealers with 100,000 customers or greater handled 59.5% of customer orders and 98.3% of customer accounts identified in the data sample. If these smaller broker-dealers attract enough customers such that they represent a more significant fraction of orders, it is likely they will also subsequently fall above the customer account threshold and be required to begin publishing Rule 605 reports.

[1599] *See* discussion *infra* section IX.E.1.a).

[1600] *See supra* section IX.D.1.a)(1) for a discussion of the effects of the amendments expanding the scope of reporting entities to include larger broker-dealers on competition among broker-dealers on the basis of execution quality.

''further concentration and funneling of customer order flow among a small portion of broker-dealers.'' The commenter stated that ''[p]roviding execution quality reports constitute a significant advantage . . . and could be a tipping point in their decision to part away with their current broker-dealer.'' [1601] As discussed above, it is also possible that smaller broker-dealers may gain a competitive advantage in the form of lower costs because of not having to prepare Rule 605 reports. To the extent the smaller broker-dealers are disadvantaged by not making Rule 605 reports available, there is nothing that precludes them from preparing and publishing reports that comply with Rule 605 requirements.[1602] However, the Commission acknowledges that it is possible that, because of these amendments, smaller broker-dealers that are unable,[1603] or choose not, to offer the same levels of transparency as larger broker-dealers may lose customers to larger broker-dealers for which better execution quality information is available, which may cause some smaller broker-dealers to exit the market.[1604] The Commission is unable to quantify the likelihood that a brokerage firm will cease operating because of an inability to compete with the transparency offered by larger broker-dealers, and commenters did not provide data that would support such an analysis. Even if some smaller broker-dealers were to exit, the Commission does not believe this will significantly impact competition in the market for brokerage services because the market is served by a large number of broker-dealers.[1605] The Commission recognizes that smaller broker-dealers may have unique business models that are not currently offered by competitors, but other broker-dealers, including new entrants, could create similar business models if demand is adequate.

One commenter stated that excluding smaller broker-dealers from reporting requirements means that ''only 6.7% of broker-dealers'' would be subject to reporting requirements, and ''[c]ustomers who use smaller broker-dealers are just as entitled to information about how their orders are or may be handled as customers who use larger broker-dealers.'' [1606] The Commission agrees that lowering the threshold would be beneficial if more broker-dealer customers are able to benefit from the adopted modifications to reporting entities; however, an analysis shows that a customer account threshold of 100,000 customer accounts includes more than 98% customer accounts, and that those customers whose accounts are not included are more likely to be institutional investors, who have alternative sources of information about their broker-dealers' execution quality.[1607]

The same commenter also stated that limiting the Rule 605 reporting requirements to larger broker-dealers would ''create an information gap about new entrants to the retail broker-dealer space where there may be a greater need to see data about execution quality.'' [1608] As stated above, it is possible that an increase in competition among larger broker-dealers on the basis of execution quality may spill over to affect smaller broker-dealers, as their customers may expect more transparency; [1609] this could be true of new entrants to the market for brokerage services as well. If this occurs, then customers of new entrants may also benefit from increased transparency. However, absent the standardized reporting standards under Rule 605, new entrants may be able to publish ad hoc execution quality reports that focus on execution quality metrics in which they perform well, and thus it is possible that these customers may continue to face some information asymmetries.[1610] As described above, this is expected to be a minority of customers.[1611]

(2) Switching Costs

The effects of these amendments to Rule 605 on competition among reporting entities may be limited if investors incur high costs to switch between broker-dealers, and/or if broker-dealers incur costs to switch between market centers in response to information about execution quality. To the extent that competition among reporting entities on the basis of execution quality is limited, this could limit the extent to which execution quality will improve as a result of these amendments.[1612]

First, if the costs for customers to switch broker-dealers are significant,[1613] this will limit the extent to which Rule 605 promotes competition among broker-dealers on the basis of execution quality. However, switching costs for both individual and institutional investors may be limited. For example, institutional investors are likely to have multiple broker-dealers, which facilitates the transfer of business to better-performing broker-dealers, and, for individual investors, transferring between retail brokers may be less costly, for example, because some retail brokers will compensate new customers for transfer fees that their outgoing broker-dealer may charge them.[1614]

Second, the presence of switching costs that broker-dealers incur from changing the primary trading venues to which they route orders [1615] may limit the effects of these amendments on competition among market centers. However, the Commission expects this to be less of an issue for the larger broker-dealers that will be required to produce Rule 605 reports,[1616] as these broker-dealers will likely face lower switching costs. For example, larger broker-dealers are likely already connected to multiple national securities exchanges. They are experienced with routing order flow across a larger variety of market centers and/or have sufficient bargaining power to renegotiate any agreements that they

[1601] *See* Letter from JT at 1–2.

[1602] The costs for smaller broker-dealers to prepare execution quality reports may not be the same as the costs for larger broker-dealers. *See infra* section IX.D.2.b)(2) for further discussion.

[1603] For example, if investors make use of third-party summaries of Rule 605 reports, these summaries may not incorporate execution quality information outside of ''official'' Rule 605 reports. In that way, smaller broker-dealers may be unable to offer the same level of transparency even if they prepare an execution quality report containing all of the information and according to the exact specifications of Rule 605.

[1604] This was also acknowledged in the Proposing Release. *See* Proposing Release, 88 FR 3786 at 3876 (Jan. 20, 2023).

[1605] *See supra* section IX.C.4.a)(1) for a discussion of the current structure of the market for brokerage services.

[1606] *See* Robinhood Letter at 45.

[1607] *See* discussion *infra* section IX.E.1.a).

[1608] *See* Robinhood Letter at 45.

[1609] *See also* Proposing Release, 88 FR 3786 at 3876 (Jan. 20, 2023).

[1610] These information asymmetries are described in more detail in *supra* section IX.C.1.a).

[1611] *See supra* note 1599 and corresponding text.

[1612] The effect of switching costs on competition may also depend on the variability of reporting entities' execution quality over time. For example, if the execution quality of any given reporting entity varies significantly over time, customers of those reporting entities may find it optimal to switch between reporting entities with some frequency, which would increase their overall switching costs. On the other hand, if the execution quality of reporting entities is relatively constant over time, the number of times that a customer will optimally want to switch between reporting entities will likely be more limited, and in this case switching costs may be a relatively small and/or short-term friction.

[1613] *See supra* section IX.C.4.a)(1) for a discussion of costs related to switching broker-dealers.

[1614] *See supra* note 1289 for an example.

[1615] *See supra* section IX.C.4.b)(2) for discussions of costs broker-dealers may face when switching trading venues.

[1616] The competitive effects of these amendments will principally accrue to larger broker-dealers, who will be required to prepare Rule 605 reports, and thus will be the most likely to be incentivized to switch market-centers as a result of additional information about market center execution quality. However, these effects may spill over to smaller broker-dealers as well per the discussion in *supra* section IX.D.2.b)(2). For these smaller broker-dealers, switching costs may be more binding.

might have with individual market centers.

(3) Limited Usage and Search Costs

The benefits of these amendments to Rule 605 for transparency, competition, and execution quality may be limited if market participants are not likely to make use of the additional information available under these amendments, *e.g.,* because this information is difficult to access or is not useful to market participants due to the availability of other sources of information about execution quality.

For example, investors currently have access to information about the execution quality achieved by their broker-dealers for their not held orders,[1617] which in certain circumstances may be more relevant for institutional investors than aggregate information about the execution quality of broker-dealers' held orders [1618] and may lead to a low usage rate by institutional investors of larger broker-dealers' Rule 605 reports. This could limit the benefits of these amendments for competition in the market for institutional brokerage services. However, to the extent that institutional investors' alternative sources of execution quality information do not contain information about all of their relevant orders, and/or cannot be easily used to compare across broker-dealers with which an investor does not do business,[1619] these amendments will likely impact competition for institutional brokerage services as well.

Furthermore, the volume and complexity of data produced by Rule 605 reports (*i.e.,* both the number of rows and columns of Rule 605 reports) will increase as a result of the amendments modifying the coverage of orders and expanding the information required by Rule 605.[1620] As stated by some commenters,[1621] both of these factors may make the evaluation of the raw data in Rule 605 reports costlier. One commenter stated that ''[f]urther transparency that generates costs, but if not used by customers, is a waste of resources and ultimately would create costs without any real benefits.'' [1622] The Commission disagrees that the amended rule will result in costs without any benefits. The amended rule will result in numerous benefits described above. Furthermore, the increase in complexity of Rule 605 reports is not likely to significantly reduce the benefits of the amended rule. The Commission agrees with a commenter's statement that, since they are designed to be machine-readable, increasing the number of rows in Rule 605 reports is not likely to significantly increase market participants' cost to process and interpret these reports.[1623] Market participants that currently have the resources to process and analyze the raw data contained in Rule 605 reports are likely to have the resources to process and analyze the additional data elements. To the extent that some investors may not have access to the resources to directly analyze the raw Rule 605 data as a result of its increase in complexity,[1624] the Commission expects that independent analysts, consultants, broker-dealers, the financial press, academics, and market centers will continue to respond to the needs of investors by analyzing the disclosures and producing more digestible information using the data.[1625] This was supported by one commenter, who stated that ''even though a certain percentage of retail investors may not read the Rule 605 reports, they will still benefit indirectly as the enhanced disclosure will promote competition, improve regulatory oversight, and facilitate use by third-party researchers and academics.'' [1626]

The benefits of these amendments to Rule 605 for transparency, competition, and execution quality may also be limited by the presence of search costs. These amendments are expected to increase the number of Rule 605 reporting entities from 228 to 343.[1627] Market participants that demand a complete or mostly complete set of Rule 605 reports will need to search through and download reports from a greater number of websites, which will increase their search costs.[1628] If, in order to avoid this increase in search costs, market participants do not incorporate execution quality information from the additional reporting entities into their search or analysis of Rule 605 reports, this will limit the benefits of the expansion of Rule 605 reporting entities.

(4) Liquidity Externalities

The effects of these amendments to Rule 605 on competition among market centers may be limited by the development of liquidity externalities, or the consolidation of liquidity on a few dominant market centers.[1629] Under such circumstances, while the consolidation of liquidity on market centers offering superior execution quality may benefit market participants in the short run,[1630] it may also lead to barriers to entry in the market for trading services, as new entrants may have a harder time attracting sufficient liquidity away from established liquidity centers. This could also lead to consolidation or exit by smaller market centers. This could have the effect of reducing competition in the market for trading services. The Commission is unable to quantify the likelihood that some smaller market centers will cease

[1617] *See supra* note 1003 and accompanying text discussing broker-dealers' requirements under Rule 606(b)(3) to provide individualized reports of execution quality upon request for not held orders.

[1618] *See supra* section IX.C.4.a)(1)(b) for a discussion of institutional investors' usage of not held orders.

[1619] *See* discussion in *supra* section IX.C.2.c).

[1620] For example, dividing each notional order size bucket up into further categories to capture lot type will increase the complexity of Rule 605 reports by increasing the number of rows.

[1621] *See, e.g.,* Robinhood Letter at 41–42, stating that ''the volume and complexity of Rule 605 reports would only increase if Proposed Rule 605 were adopted because more market participants, more orders, and more statistics would be included in the reporting, making them even harder to read;'' Data Boiler Letter, stating that the proposed statistics were ''overly complicated for the average investors to digest;'' Tastytrade Letter at 4, stating that ''under the new proposal by the Commission, 605 reports would expand to thirty-seven columns wide and forty-two rows deep. That will result in 1,554 data points per ticker on a universe of approximately 10,000 NMS traded products.''

[1622] *See* Tastytrade Letter at 5.

[1623] *See, e.g.,* FIF Letter at 16, stating that ''[a]dding rows and columns to the Rule 605 report, within reason, would not materially increase the costs of processing these reports and storing the relevant data,'' and that ''[the Rule 605 report] is intended to be machine-readable, not human-readable.''

[1624] *See supra* section IX.C.2.b) for a discussion of the difficulties that individual investors may face when accessing Rule 605 reports.

[1625] *See, e.g., supra* notes 1076–1077, describing the use of Rule 605 data in academic literature, in comment letters related to Commission and SRO rulemaking, and the financial press.

[1626] *See* Better Markets Letter at 9–10.

[1627] *See supra* section VIII.C for a description of these estimates.

[1628] *See supra* section IX.C.3.d) for a discussion of the search costs associated with collecting information from Rule 605 reports.

[1629] For theoretical discussions of liquidity externalities, *see* Marco Pagano, *Trading Volume and Asset Liquidity,* 104 Q. J. Econ. 255 (1989); Ananth Madhavan, *Consolidation, Fragmentation, and the Disclosure of Trading Information,* 8 Rev. Fin. Stud. 579 (1995).

[1630] There is a large body of academic literature that examines the benefits to traders from the consolidation of liquidity. *See, e.g.,* H. Mendelson, *Consolidation, Fragmentation, and Market Performance,* 22 J. Fin. and Quantitative Analysis 189 (1987), in which the author finds that ''fragmentation reduces the expected quantity traded, increases the price variance faced by individual traders, and reduces the expected gains from trade.'' *See also* Pagano, *supra* note 1629, in which the author finds that the concentration of liquidity is generally more efficient than fragmentation, and Madhavan, *supra* note 1629, in which the author finds that ''fragmentation results in higher price volatility and violations of price efficiency.'' At the same time, there is also a large body of literature examining the competitive benefits of fragmentation; *see, e.g.,* T. Hendershott & H. Mendelson, *Crossing Networks and Dealer Markets: Competition and Performance,* 55 J. Fin. 2071 (2000); B. Boehmer & E. Boehmer, *Trading Your Neighbor's ETFs: Competition or Fragmentation?,* 27 J. Banking & Fin. 1667 (2003).

operating, and commenters did not provide data to support such an analysis.

(5) Dimensions of Execution Quality Not Captured by Rule 605 Reports

The expected benefits from these amendments to Rule 605 may be lessened to the extent that there are dimensions of execution quality not captured by Rule 605 reports which drive order handling decisions. For example, the ability of customers and/or traders to remain anonymous or limit information leakage may not be a dimension that is easily discernible from looking at Rule 605 data, though it is a feature of execution quality that may be valued by some investors.[1631]

Furthermore, the extent to which the reported statistics are perceived as an insufficiently timely proxy for a reporting entities' ability to secure favorable executions may dampen the benefits of these amendments for execution quality. This may happen if, for example, future market developments render the monthly reporting requirement too infrequent to be useful.

In this vein, one commenter stated that policymakers should not ''prescribe or endorse certain statistical benchmarks,'' because ''other shopping comparisons emphasize different aspects, such as customer service,'' [1632] and that ''one group may prefer one set of benchmarks that make their brands look better.'' [1633] This commenter instead stated that, ''[i]f any constituent including the regulators want to have comprehensive metrics produced, let's have the vendors compete for their business.'' [1634] The Commission agrees with the commenter that different market participants may have preferences for different aspects of execution quality, and acknowledges that not all of these aspects may be included in Rule 605 reports as amended. The Commission also acknowledges that, to the extent that this causes market participants to focus on some dimensions of execution quality to the detriment of others, these amendments may reduce execution quality along certain dimensions that may be relevant to some investors.[1635] The Commission also recognizes that the different reporting entities may also have a preference for those benchmarks that make them look the most favorable.[1636] However, rather than being exacerbated by the ''prescription'' of standardized metrics, having a standardized set of execution quality metrics will alleviate this concern by requiring the disclosure of metrics that market participants are able to compare across reporting entities using the same set of metrics. It is unlikely that a set of standardized metrics will result from a competitive environment, for the reasons described in the Market Failures section.[1637]

(e) Interacting Benefits of the Final Rule and the MDI Rules

The Commission received a comment stating that the MDI Rules, once implemented, could have positive interacting effects with the final Rule 605 amendments.[1638] The Commission anticipates that the additional information contained in consolidated market data once the MDI Rules are implemented will allow more informed order routing decisions. This in turn will help facilitate best execution, which will reduce transaction costs and increase execution quality.[1639] However, given that the MDI Rules have not yet been implemented, data that will be required for a quantitative analysis of a baseline that includes the effects of the MDI Rules, and of the benefits of the final Rule 605 amendments with new baseline assumptions, are not available. Instead, the Commission has included assumptions about the effect of the MDI Rules in its baseline and has analyzed the benefits and costs relative to this baseline.[1640]

2. Costs

As discussed in detail below, the Commission recognizes that these amendments to Rule 605 will result in initial and ongoing compliance costs to reporting entities. The Commission quantifies the costs where possible and provides qualitative discussion when quantifying costs is not feasible. Most of the compliance costs related to these amendments to Rule 605 involve a collection of information, and these costs are discussed above in relation to the expected burdens under the Paperwork Reduction Act, with those estimates being used in the economic analysis below.[1641]

(a) Compliance Costs

The majority of costs related to these amendments to Rule 605 will be in the form of compliance costs, including both initial and ongoing. Table 9 provides a summary of the estimated change in compliances costs [1642] resulting from these amendments. The majority of both initial and ongoing compliance costs will be related to expanding the scope of reporting entities. However, a significant portion of initial compliance costs will also result from the amendments modifying the coverage of orders and information required by Rule 605, as market centers that were required to prepare Rule 605 reports (''prior reporters'') will need to update their systems, and additionally some new market centers trading in fractional shares will be required to report. Lastly, compliance costs resulting from the amendment requiring reporting entities to prepare summary execution quality reports will mostly be ongoing.

[1631] *See, e.g.,* Carole Comerton-Forde & Kar Mei Tang, *Anonymity, Liquidity and Fragmentation,* 12 J. Fin. Mkt. 337 (2009), who found evidence of a migration in order flow from the non-anonymous New Zealand Exchange (NZX) to the Australian Stock Exchange after the latter increased anonymity by removing broker identifiers from the central limit order book.

[1632] *See* Data Boiler Letter II at 1. Another commenter similarly stated that the use of the summary reports to compare across broker-dealers could be misleading if they do not account for ''other aspects of the services that brokers provide or offer, including fees, interest rates, commissions, ease of use, customer service, accessibility, tools, and educational resources.'' Virtu Letter at 11.

[1633] *See* Data Boiler Letter II at 1. This commenter also stated that they did not support the prescription or endorsement of statistical benchmarks because ''[s]ome benchmarks use the average rather than the median (tail risk).'' The Commission agrees that statistics calculated using the median rather than the mean is often preferred when dealing with data that contain extreme outliers, such as some of the data being collected under Rule 605 (such as time-to-execution). However, as stated by another commenter, medians are problematic in that they cannot be aggregated across rows. *See* FIF Letter at 21–22; *see also infra* section IX.E.3.b)(1) for further discussion.

[1634] *See* Data Boiler Letter II at 1.

[1635] *See infra* section IX.D.2.b)(3) for further discussion.

[1636] *See supra* section IX.B for further discussion.

[1637] *See supra* note 976 and corresponding text.

[1638] *See* Robinhood Letter at 39 (''The SEC contemplates that amending Rule 605 could improve execution quality, including by improving execution prices, execution speeds, size improvement, and fill rates. . . . These potential benefits are likely enhanced when combined with the anticipated effects of the pending MDI Rules and our recommended changes regarding the Tick Size Proposal . . . the MDI Rules, by adjusting round lot sizes and enhancing the information displayed on the consolidated market data feeds, are expected to increase competition and encourage price improvement''); *id.* at 40.

[1639] *See* section IX.C.1.c)(2), *infra,* discussing benefits and costs based on implementation assumptions.

[1640] *See id.*

[1641] *See supra* section VIII for a discussion of how these amendments will create burdens under the PRA.

[1642] The discussion in section VIII.D considers the total expected ongoing compliance costs for all reporting entities, both new respondents and prior respondents. To focus on the costs that will directly follow from these amendments, this section focuses on the expected change in ongoing costs, which excludes the portions of ongoing costs that prior respondents incurred prior to these amendments.

Table 9: Estimated Aggregate Compliance Costs, by Cost Category

Cost Category	Initial Aggregate Compliance Costs	Ongoing Aggregate Compliance Costs
Expanding the Scope of Reporting Entities	$3.8 million	$4.9 million
Modifications to Information Required	$3.6 million	$5.3 million
Proposed Summary Execution Quality Reports	$1.8 million	$1.1 million
Total	**$9.3 million**	**$11.3 million**

This table presents estimates of the compliance costs related the to three broad categories of the amendments to Rule 605 (expanding the scope of reporting entities, modifications to the coverage of orders and information required, and requiring the preparation of summary reports). Numbers are based on the estimated number of respondents and PRA costs in sections VIII.C and VIII.D supra and have been rounded to the nearest tenth of million to avoid false precision. Further breakdowns of these estimates are presented in Tables 10, 11, and 12.

Table 9 further breaks aggregate compliance costs down into three separate categories—costs related to the expansion of reporting entities, costs related to modifications to information required, and costs related to the preparation of summary execution quality reports. Estimates for the costs in each of these categories depend on a number of factors, including wages, inflation, and firm size, and the Commission acknowledges that the aggregate costs presented may be underestimated to the extent that wages and/or inflation are higher than those used in the estimation. Meanwhile, costs in each of these categories may also be overestimated if reporting entities are able to more cost-effectively contract with third-party vendors to prepare their reports.[1643] Due to their ability to leverage their technical expertise and potential economies of scale, third-party vendors may be able to prepare Rule 605 reports for a lower cost than if each individual reporting entity prepares its own report, and could pass these lower costs on to their customers, resulting in lower compliance costs. However, the Commission is unable to know the percentage of entities that made use of third-party vendors to prepare their Rule 605 reports prior to these amendments, nor the percentage of entities that will make use of third-party vendors following these amendments. Therefore, the Commission is basing its compliance cost estimates on the highest of its estimated costs to prepare of Rule 605 reports in order to be conservative, which is equivalent to the cost of in-house preparation of Rule 605 reports ($51,648 per respondent per year).[1644]

(1) Compliance Costs Related To Expanding the Scope of Rule 605 Reporting Entities

As a result of the amendments expanding the scope of Rule 605 reporting entities, market centers and broker-dealers that were not required to publish Rule 605 reports prior to these amendments will incur initial costs to prepare and post Rule 605 reports for the first time, which may include developing any policies and procedures that may be needed to do so, and ongoing costs to continue to prepare them each month. Larger broker-dealers will incur initial and ongoing compliance costs as a result of the amendment expanding the scope of Rule 605 reporting entities to include larger broker-dealers. Similarly, the amendments requiring reporting entities to prepare separate reports for their SDPs will result in market centers that, prior to these amendments, were not required to prepare Rule 605 reports facing initial and ongoing compliance costs. The Commission estimates that 85 broker-dealers, along with 10 SDPs operated by broker-dealers,[1645] will be required to start publishing Rule 605 reports as a result of the amendment expanding the scope of Rule 605 reporting entities.[1646] Table 10 breaks down the initial and ongoing compliance costs associated with these two types of reporting entities.

[1643] The Commission estimates that, while preparing in-house reports will result in an annualized ongoing cost of $51,648 per respondent, contracting with a third party to prepare Rule 605 of their behalf will result in an annualized ongoing cost of between $36,000 and $42,000 per respondent. *See supra* note 957 and corresponding text. The Commission uses the higher estimate of in-house reporting in the present analysis to obtain a more conservative estimate of potential costs.

[1644] *See supra* note 1643.

[1645] *See infra* section IX.E.1.a) for a discussion of the estimated number of larger broker-dealers (*i.e.,* broker-dealers that introduce or carry customers above a threshold number of customer accounts), that will be required to prepare execution quality reports pursuant to final Rule 605, defining the customer account threshold as 100,000 customer accounts.

[1646] In addition, the Commission estimates that 20 market centers that trade exclusively in fractional shares will be required to prepare Rule 605 reports for the first time. *See infra* section IX.D.2.a)(2) for a discussion of the expected compliance costs for these reporting entities.

Table 10: Estimated Aggregate Compliance Costs Related to Proposed Expansion of Rule 605 Reporting Entities

	Number of Respondents	Initial Aggregate Compliance Costs	Ongoing Aggregate Compliance Costs
Broker-Dealers	85[a]	$3.4 million [b]	$4.4 million [c]
SDPs	10[d]	$0.4 million [d]	$0.5 million [c]
Total	**95**	**$3.8 million**	**$4.9 million**

This table presents estimates of the compliance costs related to the amendments to Rule 605 expanding the scope of reporting entities. Numbers are based on the estimated number of respondents and PRA costs in sections VIII.C and VIII.D supra and have been rounded to the nearest tenth of million to avoid false precision.

[a] The number of new broker-dealer respondents is estimated using data from 2022 FOCUS Report Form X-17A-5 Schedule I filings and CAT, according to the procedure described in detail in infra note 1743.

[b] The estimate of initial compliance costs to new reporters is based on the monetized initial burden in supra note 955 for new respondents, assuming that these respondents will incur 100 initial burden hours at an average hourly cost of ($40,150/100 hours) = $401.50 per respondent per hour.

[c] The estimate of ongoing compliance costs to new reporters is based on the monetized annual burden in supra note 952 for new respondents, assuming that these respondents will incur 11 ongoing burden hours per month at an average hourly cost of ($51,648/(11 hours * 12 months)) = $391.00 per respondent per hour.

[d] The Commission does not have knowledge of the number of SDPs in operation and therefore has chosen a conservative estimate of 10 SDPs operated by broker-dealers.

New reporters will face one-time, initial compliance costs to prepare Rule 605 reports for the first time, which may include costs to develop and implement procedures. It is likely that the majority of these costs will relate to the development of systems to obtain, store and process the data required for Rule 605 reports.

Larger broker-dealers that generally or exclusively route orders away will need to obtain information, such as the time of order execution and execution price, from trade confirmations provided by the execution venue. In addition, both broker-dealers and market centers will need to match their order information to historical price and depth information available via the exclusive SIPs or, following the implementation of the MDI Rules, competing consolidators,[1647] to determine the NBBO (and/or best displayed) quote and size at the time of order receipt (or executability) and at the time of order execution, and use this data to calculate the required statistics.[1648] These new reporters likely retained most, if not all, of the underlying raw data necessary to generate these reports in electronic format prior to these amendments, or obtained this information from publicly available data sources, and calculated similar measures to those that will be required under Rule 605 for their own internal purposes prior to these amendments.[1649] However, as a result of the amendments, new reporters may have to acquire or develop data specialists and/or programmers to the extent that the information required by Rule 605 is different or more complex than the information that the new reporters typically process, and/or acquire legal specialists to help ensure compliance with Rule 605.

One commenter stated that requiring larger broker-dealers to newly prepare Rule 605 reports will be costly because ''[t]his is not a type of report that broker-dealers that are not also market centers generally prepare.'' [1650] Another commenter stated that the broad scope of the proposed inclusion of larger retail broker-dealers will impose significant costs.[1651] The Commission acknowledges that many larger broker-dealers will not have previous experience with preparing Rule 605 reports, and for that reason has allocated estimates of initial compliance costs to first-time reporters, including broker-dealers, that are higher than those allocated to prior reporters.[1652]

These compliance costs related to expanding the scope of Rule 605 reporting entities may be under- or overestimated to the extent that larger broker-dealers, which are assumed to have the same ongoing compliance costs as market centers and the same initial and ongoing compliance costs as SDPs operated by broker-dealers, may experience higher or lower initial and/or ongoing costs than other types of reporting entities. For example, larger broker-dealers may incur higher initial costs to the extent that they did not obtain transaction information, such as the time of order execution and execution price, from trade confirmations provided by execution venues prior to these amendments, and therefore will need to develop the procedures for doing so. Broker-dealers

[1647] *See supra* section IX.C.1.c)(2) for a discussion of the unimplemented MDI Rules.

[1648] For example, a broker-dealer that routes an order away for execution will receive time of order execution and execution price as part of the trade confirmation provided by the execution venue. The broker-dealer can then use historical price information available via the exclusive SIPs to determine the NBBO at the time of order receipt and at the time of order execution, the number of shares displayed at the NBBO, and the best available displayed price, if such price is being disseminated, and use this data to calculate the required execution quality statistics. With respect to NMLOs, the broker-dealer can also use this historical price information available via the exclusive SIPs to determine when the order became executable, based on when the NBBO first reached the order's limit price.

[1649] For example, broker-dealers may calculate similar measures as part of their Best Execution Committees' periodic review. *See supra* note 1100 and accompanying text.

[1650] *See* Robinhood Letter at 42. The commenter suggested that, rather than Rule 605 reports, broker-dealers should be required to submit expanded Rule 606 reports that contain information about execution quality. *See infra* section IX.E.5.b) for a discussion and the Commission's response to this alternative.

[1651] *See* Cambridge Letter at 7.

[1652] Specifically, while the analysis in Table 9 assigns first-time respondents, such as larger broker-dealers, a per-respondent initial compliance cost of $40,150, the analysis in Table 10 assigns preexisting reporting entities, who have experience with preparing Rule 605 reports, a much lower initial per-respondent cost of $20,075.

may also face higher ongoing costs as compared to market centers that mostly execute the shares that they receive, if collecting information for trades executed at away market centers is costlier than analyzing in-house trade information, *e.g.,* because it results in delays in processing the trade information. On the other hand, larger broker-dealers may incur lower initial costs if they are more likely than market centers to have calculated similar measures as part of their Best Execution Committees' periodic review prior to these amendments.[1653] In addition, the Commission does not believe that there will be significant additional costs to collecting information for trades executed at away market centers, as given the monthly reporting frequency of Rule 605 reports, broker-dealers should have sufficient time to collect and process the information. Since it is not possible to determine whether larger broker-dealers will face higher or lower compliance costs than market centers, the Commission is conservatively estimating that broker-dealers will incur the same compliance costs as other types of reporting entities.

Furthermore, many of the larger broker-dealers that will be newly included in the scope of reporting requirements have experience with filing Rule 605 reports prior to these amendments; *e.g.,* because they operate an ATS, engage in market making, or are otherwise affiliated with market centers that filed Rule 605 reports prior to these amendments.[1654] Likewise, broker-dealers that operate SDPs could also have lower initial costs to the extent that these SDPs qualified as market centers that were required to publish Rule 605 reports prior to these amendments. In both cases, these reporting entities can leverage this experience to prepare the reports for these additional lines of businesses more cost effectively.

One commenter stated that ''many broker-dealers outsource reporting,'' and that ''bringing that reporting in-house would be a substantial cost.'' [1655] The amended rule does not preclude larger broker-dealers from outsourcing the preparation of its Rule 605 reports by contracting with third parties. Broker-dealers that are scoped into Rule 605 reporting requirements will be able to continue to use third parties to prepare their execution quality metrics, to the same extent that they found it optimal to do so prior to these amendments.

(2) Compliance Costs Related to Modifications to the Coverage of Orders and Information Required by Rule 605 Reports

As a result of the amendments modernizing and expanding the coverage of orders and information required by Rule 605 reports, reporting entities will incur initial compliance costs and additional ongoing compliance costs.[1656] First, the estimated 228 prior reporters [1657] will incur initial costs to update their systems to collect and store new information and to calculate modernized and additional metrics, as well as a potential increase in ongoing costs as a result of additional data that will need to be collected and stored.[1658] Second, the adopted amendment expanding the coverage of order sizes included in Rule 605 to include orders for less than one share will result in an additional estimated 20 market centers that trade exclusively in fractional shares to be required to begin filing Rule 605 reports.[1659] Third, the 16 national securities exchanges and 1 national securities association will be required to amend the Rule 605 NMS Plan to account for the new data fields required to be reported. Table 11 breaks down the associated initial and ongoing compliance costs.

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[1653] *See supra* section IX.C.2.d); *see, e.g.,* Virtu Letter at 11, stating that ''many retail brokers already monitor execution quality on these and other order types excluded under current Rule 605 when measuring the execution quality provided by market centers.''

[1654] For example, based on larger broker-dealers' answers in their Q4 2022 FOCUS Report Form X–17A–5 Schedules I and II, the Commission estimates that 28 out of the 85 broker-dealers identified as introducing or carrying at least 100,000 customer accounts also engage in OTC or specialist market making activities. Specifically, 16 of these larger broker-dealers answered ''Yes'' to item 8075 of Schedule I, asking whether a respondent is registered as a specialist on a national securities exchange in equity securities, 19 of them reported non-missing gains or losses from OTC market making in exchange listed equity securities in item 3943 of Schedule II, while 7 of them reported both OTC and specialist equity market maker activities. An analysis in the Proposing Release of Q4 2021 FOCUS Report Form X–17A–5 Schedules I and II found similar results. *See* Proposing Release, 88 FR 3786 at 3880, n.968 (Jan. 20, 2023).

[1655] *See* TastyTrade Letter at 5.

[1656] This analysis compares the costs that will accrue to new reporting entities, including larger broker-dealers and SDPs, to a baseline world in which these entities do not have to publish Rule 605 reports. As such, this section does not consider the cost of the amendments modifying the coverage and information required by Rule 605 to apply to first-time reporting entities, as these entities instead will face the costs of initially developing systems to prepare Rule 695 reports (rather than, *e.g.,* modifying existing systems).

[1657] *See supra* note 942 and accompanying text for a discussion of this estimate.

[1658] One commenter stated that ''[a]dding rows and columns to the Rule 605 report, within reason, would not materially increase the costs of processing these reports and storing the relevant data.'' FIF Letter at 16. If so, then this could be a mitigating factor to the Commission's estimates of the increase in current reporting entities' compliance costs.

[1659] Using a sample of CAT from Mar. 2022, the Commission identified 19 firm MPIDs that executed fractional shares during the sample time period that did not have a corresponding Rule 605 report; this was rounded up to 20 to be conservative. A similar analysis using a more recent sample of CAT data found 19 firms that exclusively executed fractional shares for at least one month during calendar year 2023; however, an estimate of 20 firms has been maintained to be conservative. Based on FOCUS data from calendar year 2022, these firms are relatively large, with an average net capital of $1.75 billion, which is similar to the average net capital of all larger broker-dealers that meet the customer account threshold of at least 100,000 customer accounts ($1.6 billion). In fact, the Commission estimates that 15 of these market centers that exclusively execute fractional shares are also larger broker-dealers that meet the customer account threshold. This implies that there may be 5 broker-dealers that will be newly required to produce Rule 605 reports related to their activity as market centers as a result of trading in fractional shares, that will not be larger broker-dealers and thus will not need to produce Rule 605 reports related to their broker-dealer activities. *See supra* section II.A.2.b) for a discussion of the requirement that larger broker-dealers that are also market centers produce separate reports pertaining to each function. However, the Commission believes this to be an upper bound, as several of these identified broker-dealers either engage in trading of non-fractional orders in some months (likely odd lots), or have greater than 100,000 customers in some months. Similar numbers were found using 2021 FOCUS data in the Proposing Release; Proposing Release, 88 FR 3786 at 3880, n.971 (Jan. 20, 2023). To the extent that a market center that exclusively executes fractional shares is also a broker-dealer that meets or exceeds the customer account threshold, then this reporting entity will be required to file separate Rule 605 reports pertaining to each function. *See supra* section II.A.2.b).

Table 11: Estimated Aggregate Compliance Costs Related to Amendments Modifying the Information Required by Rule 605

	Number of Respondents	Initial Aggregate Compliance Costs	Ongoing Aggregate Compliance Costs
Costs to Prior Reporters	228 [a]	$2.7 million [b]	$4.3 million [c]
Costs to Market Centers Trading Fractional Shares	20 [d]	$0.8 million [e]	$1.0 million [f]
Cost to NMS Plan Participants to Update Data Fields	17 [g]	$0.06 million [h]	$0 [i]
Total	**265**	**$3.6 million**	**$5.3 million**

This table presents estimates of the compliance costs related to the amendments to Rule 605 modifying the coverage of orders and information required by Rule 605 reports. Numbers are based on the estimated number of respondents and PRA costs in sections VIII.C and VIII.D supra and have been rounded to the nearest tenth of million to avoid false precision.

[a] The number of prior respondents includes 16 national securities exchanges, 1 securities association, 33 ATSs (based on the number of effective Form ATS-N filings), and an estimated 91 OTC market makers and 87 exchange market makers (based on firms' responses on their 2022 FOCUS Report Form X-17A-5 Schedules I and II).

[b] The estimate of initial compliance costs to prior reporters is based on the monetized initial burden in supra note 951 for prior respondents, assuming that these respondents will incur 30 initial burden hours as a result of the amendments at an average hourly cost of ($20,075/50 hours) =$401.50 per respondent per hour.

[c] The estimate of ongoing compliance costs to prior reporters is based on the monetized annual burden in supra note 952. It is assumed that the cost increase associated with the amendments for preexisting respondents is equivalent to four additional ongoing burden hours per month (24 per year) at an average hourly cost of ($51,648/(11 hours *12 months))=$391.00 per respondent per hour.

[d] The Commission estimates that 20 firms will newly be required to file Rule 605 reports as a result of the inclusion of fractional orders less than one share. See supra note 1659.

[e] The estimate of initial compliance costs to new respondents (in this case, market centers that will newly be required to prepare Rule 605 reports as a result of trading fractional shares) is based on the monetized initial burden in supra note 955 for new respondents, assuming that these respondents will incur 100 initial burden hours at an average hourly cost of ($40,150/100 hours) =$401.50 per respondent per hour.

[f] The estimate of ongoing compliance costs to market centers that will newly be required to prepare Rule 605 reports as a result of trading fractional shares is based on is based on the monetized annual burden in supra note 952 for new respondents, assuming that these respondents will incur 11 ongoing burden hours per month at an average hourly cost of ($51,648/(11 hours * 12 months)) = $391.00 per respondent per hour.

[g] The number of NMS plan participants includes 16 national securities exchanges and 1 securities association.

[h] The estimate that the monetized initial burden for preparing and filing an amendment to the NMS Plan will include approximately $43,605 in aggregate internal costs per participants as well as an aggregate external cost of $19,550 resulting from outsourced legal work. See supra section VIII.D.

[i] The Commission estimates that the costs related to updating data fields will be a one-time cost, and thus will not incur any additional ongoing compliance costs.

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As a result of these amendments, prior reporters will incur initial compliance costs to update their systems to collect and store new information.[1660] For example, prior reporters will need to expand their data collection systems to include additional order types, such as stop orders, short sale orders, and orders submitted outside of regular trading hours, and will need to update their systems to reclassify certain orders, such as IOCs, riskless principal orders, and midpoint-or-better NMLOs, into new or different order type categories. Similarly, prior reporters will need to expand their data collection systems to incorporate additional order sizes, including odd-lots, fractional orders, and larger-sized orders.

Prior reporters will also incur initial compliance costs to update their data

[1660] The Commission assumes that the majority of reporting entities' initial burden hours under the PRA will be spent updating current systems as a result of the many changes to Rule 605, and thus estimates that 30 of the 50 initial burden hours estimated for prior reporters and described in *supra* note 951 will be allocated to compliance with the amendments modifying the information contained in Rule 605.

processing software to generate modernized and additional metrics. For example, prior reporters will need to update their methodologies for calculating realized spread to include additional measures, and will need to develop programs (*i.e.,* code) to calculate newly required metrics, such as E/Q. Some of the metrics will involve matching trade information to data elements that were not required by Rule 605 prior to these amendments but that can be obtained from public data sources, such as the best displayed price for calculating price improvement relative to the best displayed price,[1661] and the number of shares displayed at the NBBO for calculating the benchmark measure related to size improvement.[1662] As stated by a commenter, the Consolidated Audit Trail currently requires firms to report order events with at least a millisecond granularity.[1663] Thus, it is likely that the cost to prior reporters of updating their systems to record timestamps in terms of milliseconds rather than seconds will be minimal.[1664]

After prior reporters update their systems to reflect the amendments, it is likely that changes to their ongoing costs will be limited, as the process for generating and publishing Rule 605 reports will largely be unchanged.[1665] This is because most reporting entities retained most, if not all, of the underlying raw data necessary to generate the additional data elements prior to these amendments, or are easily able to obtain this information from publicly available data sources. Furthermore, once reporting entities have developed the necessary programs to calculate the required metrics, there is limited additional effort that needs to be made beyond what prior reporters are already doing, such as monitoring and debugging these statistical programs.

One commenter stated that some of the amendments will impose additional costs on reporting entities as a result of an increase in the complexity of the calculations.[1666] Another commenter stated that they believe that the estimated annual costs associated with the Proposed Rule 605 were underestimated, because they ''neglect[ed] to take into account dedicated staff time needed for data reconciliation and validation and other ongoing compliance costs.'' These commenters did not provide the Commission with data regarding what an appropriate estimate of the annual compliance burden would be. However, the Commission recognizes that there may be some additional ongoing costs to the extent that some metrics introduced under these amendments may require more data storage or more complex calculations, such that the cost of preparing monthly Rule 605 reports may increase. Therefore, in response to these commenters, the Commission has increased its allocation of additional ongoing costs to account for additional costs of maintaining programmers and systems analysts for the ongoing technical support of Rule 605 reports.[1667]

As a result of the adopted amendment expanding the scope of Rule 605 to include information about orders for less than one share, the Commission estimates that some broker-dealers that exclusively execute fractional shares, and therefore, prior to these amendments, were not required to file Rule 605 reports in their capacity as a market center due to fractional shares falling below the smallest order size category in Rule 605 prior to these amendments, will be required to begin publishing Rule 605 reports. The Commission is assuming that these broker-dealers will incur similar initial and ongoing costs as those discussed above for larger broker-dealers and SDPs. These compliance costs may be over- or underestimated if broker-dealers that exclusively execute fractional shares have different characteristics (*e.g.,* fewer customers) than the larger broker-dealers that will be included because of the expanded scope of reporting entities. However, these firms are relatively large, with an average net capital similar to that of all larger broker-dealers that meet the customer account threshold of at least 100,000 customer accounts, and an estimated 15 of these market centers are also larger broker-dealers that meet the customer account threshold.[1668]

One commenter stated that the requirement for market centers that exclusively engage in fractional trading to comply with Rule 605 ''would harm smaller broker-dealers by creating a barrier to entry to support fractional share programs.'' [1669] The Commission acknowledges that, to the extent that a smaller broker-dealer intends to begin executing fractional shares internally, it will need to incur the initial and ongoing costs associated with complying with Rule 605. However, these compliance costs are not large enough such that this is likely, as compliance costs are estimated to be a small fraction of broker-dealer revenues, even for broker-dealers with fewer than 100,000 customers.[1670] Furthermore, as previously discussed, an analysis of firm MPIDs that exclusively execute fractional shares found that these firms tend to be relatively large, and that the majority of them will also meet the customer account threshold.[1671] Thus, there are likely barriers to entry for smaller broker-dealers to offer fractional programs that exist apart from these

[1661] *See supra* section III.B.4.g)(2) for a discussion of the data required to calculate this measure. Under MDI Rules, competing consolidators are not required to offer products that include all core data items, and therefore some competing consolidators may offer products that do not contain all information that will be required for calculating Rule 605 statistics, such as odd-lot information for the purposes of calculating the best displayed price. However, as discussed in section IX.C.1.c)(2) *supra,* the Commission believes that for competitive reasons at least one competing consolidator will offer a data product that contains all core market data items. To the extent that a reporting entity would have subscribed to a cheaper data product if not for these amendments to Rule 605, the need to subscribe to a more expensive data product represents an additional cost of complying with Rule 605 as amended.

[1662] *See supra* section III.B.4.e)(2) for a discussion of the data required to calculate this measure.

[1663] *See* FIF Letter at 17.

[1664] The commenter also stated that many market centers typically already record events with even greater precision. *See* FIF Letter at 17, stating that ''[m]arket centers, in particular, typically record trading events with greater precision than milliseconds.''

[1665] One exception is the adopted amendment requiring reporting entities to prepare summary reports summarizing key information from their Rule 605 reports. The Commission assumes that current reporters will face additional ongoing costs as a result of this amendment, and discuss these costs in *infra* section IX.D.2.a)(3).

[1666] *See, e.g.,* BlackRock Letter at 4.

[1667] Specifically, three additional ongoing monthly burden hours per respondent have been allocated to prior reporters to account for the need to maintain a technical staff, such as programmer(s) and systems analyst(s), in addition to the one additional hour in the Proposing Release. *See* footnote to Table 10; *see also* Proposing Release, 88 FR 3786 at 3881, n.976 (Jan. 20, 2023); *see also supra* note 954 and corresponding text for further discussion of the Commission's adjustment of its burden estimates in response to commenters. This additional allocation of three ongoing monthly burden hours is similar to the technology-related burdens in other rules; *see, e.g.,* Securities Exchange Act Release No. 98738 (Oct. 13, 2023), 88 FR 75100 (PRA Table 1) (Nov. 1, 2023) (allocating an additional 2 hours of work by a programmer for the purposes of preparing reports using a structured XML-based data language).

[1668] *See supra* note 1659.

[1669] *See* SIFMA Letter at 31.

[1670] For example, data on broker-dealers' median monthly revenues from FOCUS Report Form X–17A–5 Schedule II from Q4 2022 show that the estimated monthly compliance cost will represent 0.02% of the monthly revenues of broker-dealers with 100,000 customers or less, and 0.002% of the monthly revenues of broker-dealers with 100,000 customers or more. An analysis in the Proposing Release of FOCUS Report Form X–17A–5 Schedule II from Q4 2021 found similar results. *See* Proposing Release, 88 FR 3786 at 3882, n.981 (Jan. 20, 2023).

[1671] *See supra* note 1659 for further discussion of this analysis.

amendments.[1672] Therefore, the Commission does not believe that the requirement for market centers that exclusively engage in fractional trading to comply with Rule 605 will significantly increase barriers to entry for fractional share programs.

In addition, according to this commenter, because ''much of today's market infrastructure does not yet support fractional share trading,'' (including that ''FINRA does not currently have a mechanism to report fractional share trades''), ''the costs to fully modify this infrastructure would be high compared to the minimal benefit of including fractional share reporting.'' [1673] The Commission acknowledges that prior reporters will incur a cost associated with expanding their data collection systems to incorporate additional order sizes, including odd-lots, fractional orders, and larger-sized orders, and has accounted for this in its estimates of compliance costs.[1674] The Commission disagrees with the commenter that the benefits of including fractional share reporting will be minimal, particularly considering that fractional shares are a significant percentage of orders associated with individual accounts,[1675] and because there is a significant amount of variation in the execution quality received by these orders.[1676]

Lastly, the Commission estimates that the 16 national securities exchanges and 1 national securities association will incur a one-time initial cost to amend the NMS Plan to account for the new data fields required to be reported. The Commission estimates that this will mostly consist of legal time to develop and draft the amendments to the NMS Plan.

(3) Compliance Costs Related to Summary Execution Quality Reports

The estimated 228 prior reporters [1677] will face additional initial and ongoing compliance cost as a result of the adopted amendment requiring reporting entities to prepare summary reports summarizing key information from their Rule 605 reports.[1678] Table 12 breaks down the initial and ongoing compliance costs associated with this amendment.

Table 12: Estimated Aggregate Compliance Costs Related to Amendment Requiring Summary Execution Quality Reports

	Number of Respondents	Initial Aggregate Compliance Costs	Ongoing Aggregate Compliance Costs
Costs to Prepare Summary Execution Quality Reports	228 [a]	$1.8 million [b]	$1.1 million [c]

This table presents estimates of the compliance costs related to the amendment to Rule 605 requiring Rule 605 reporting entities to prepare summary execution quality reports. Numbers are based on the estimated number of respondents and PRA costs in sections VIII.C and VIII.D supra and have been rounded to the nearest tenth of million to avoid false precision.

[a] The number of preexisting respondents includes 16 national securities exchanges, 1 securities association, 33 ATSs (based on the number of effective Form ATS-N filings), and an estimated 91 OTC market makers and 87 exchange market makers (based on firms' responses on their 2022 FOCUS Report Form X-17A-5 Schedules I and II).

[b] The estimate of initial compliance costs to preexisting respondents is based on the monetized initial burden in supra note 951 for preexisting respondents, assuming that these respondents will incur 20 initial burden hours as a result of the amendments at an average hourly cost of ($20,075/50 hours)=$401.50 per respondent per hour.

[c] The estimate of ongoing compliance costs to new reporters is based on the monetized annual burden in supra note 952 for new respondents, assuming that these respondents will incur 1 additional ongoing burden hours per month (12 per year) at an average hourly cost of ($51,648/(1 hours * 12 months)) = $391.00 per respondent per hour.

The Commission estimates that these costs will not comprise the majority of overall costs to comply with Rule 605 reporting requirements, because Rule 605 summary reports contain only a small subset of the information published in the fuller Rule 605 reports. However, there may be incremental costs in structuring these summary reports using a custom CSV schema and providing these reports in a human-readable format using a PDF

[1672] Smaller introducing broker-dealers (with under 100,000 customers) could still offer their customers fractional share trading without having to prepare Rule 605 reports if their clearing broker executes the fractional share trades. If an introducing broker's fractional share orders are executed by their clearing broker, then the clearing broker will have to prepare a Rule 605 report as a market center if it meets the definition of an ''OTC market maker'' and receives ''covered orders'' for execution in such capacity. *See supra* note 170 and accompanying text for further discussion on the preparation of Rule 605 reports with respect to fractional share orders.

[1673] *See* SIFMA Letter at 31.

[1674] This was also acknowledged in the Proposing Release. *See, e.g.,* Proposing Release 88 FR 3786 at 3881 (Jan. 20, 2023), stating that ''current reporters would need to expand their data collection systems to incorporate additional order sizes, including odd-lots, fractional orders, and larger-sized orders.''

[1675] Fractional orders less than a share represent a relatively high fraction (16.4%) of executions received by individual account holders in terms of number of trades. *See supra* note 1145 and corresponding text.

[1676] *See, e.g.,* Professor Schwarz et al. Letter at 4, describing an analysis showing that E/Q received by fractional trades ranged between 0.127 to 0.915, as compared to 0.056 and 0.624 for full-share trades. *See* Professor Schwarz et al. Letter, Table 2. The commenter does not state whether these statistics include only fractional trades less than one share, or all trades that have a fractional components.

[1677] This section does not consider the cost of these amendments to those reporting entities that will begin publishing Rule 605 reports as a result of the amendments expanding the scope of Rule 605 reporting entities. *See* explanation in *supra* note 1656.

[1678] The Commission estimates that a significant portion of reporting entities' initial burden hours under the PRA will be allocated to updating current systems to prepare summary reports, which will entail both a new format and a new level of information aggregation as compared to prior Rule 605, and thus estimates that 20 of the 50 initial burden hours estimated for prior reporters and described in *supra* note 951 will be allocated to compliance with the amendments modifying the information contained in Rule 605.

renderer.[1679] Many broker-dealers already have experience structuring their data using machine-readable schemas and rendering them using a PDF renderer. For example, the Commission requires broker-dealers to submit quarterly and customer-specific order handling reports required under Rule 606 using an XML schema and associated PDF renderer.[1680]

(4) Implications of Compliance Costs for Competition

While the primary competitive effect of these amendments to Rule 605 will be to increase competition among reporting entities on the basis of execution quality,[1681] it is possible that these amendments will have a negative impact on competition if the associated compliance costs described above prevent the entry of new reporting entities or cause some entities to leave the market.[1682]

The Commission is unable to quantify the likelihood that either a trading venue or a brokerage firm will cease operating as a result of the compliance costs associated with these amendments. While the Commission does not believe that these compliance costs are large enough such that this will be likely,[1683] the Commission recognizes this possibility depends in part on whether the compliance costs associated with Rule 605 are likely to be fixed or variable. If Rule 605 compliance costs represent a fixed cost, these costs could represent a significant portion of a smaller reporting entity's revenue, such that the reporting entity may become unprofitable if subjected to these costs.[1684] This may impact competition among reporting entities, for example, by causing some reporting entities to leave the market, or preventing the entry of new ones. It may also result in broker-dealers avoiding taking on more than 100,000 customers, to avoid crossing the customer account threshold such that they need to begin complying with Rule 605 reporting requirements.

On the other hand, if Rule 605 compliance costs are variable, then the scalability of compliance costs means that smaller reporting entities will incur lower compliance costs related to execution quality reports, which will mitigate some of these concerns. Rule 605 compliance costs may be variable, *e.g.,* because smaller reporting entities handle lower order volumes and therefore will require less data storage and less complexity when calculating the metrics required by these amendments.

Furthermore, even if compliance costs are fixed from the perspective of reporting entities (which will be the case, *e.g.,* if variable costs such as data storage are dominated by fixed costs such as costs for compliance and data personnel), they may be lower if reporting entities make use of third-party vendors, who can leverage economies of scale to spread fixed costs across the potentially many reporting entities that they service, to prepare Rule 605 reports on their behalf. Therefore, to the extent that reporting entities make use of third-party vendors to prepare their Rule 605 reports, and these vendors charge reporting entities variable report preparation fees (*e.g.,* based on the amount of data), this could lead to data vendors charging lower prices to prepare the Rule 605 reports of smaller reporting entities. This could also reduce the burdens of compliance costs for smaller reporting entities.

However, even if some smaller reporting entities were to exit, the Commission does not believe this would significantly impact competition in either the market for brokerage services or the market for trading services, because both markets are served by a large number of competitors.[1685] The Commission recognizes that smaller reporting entities may have unique business models that are not currently offered by competitors, but a competitor could create similar business models if demand were adequate.

(5) Implementation Costs From Overlapping Compliance Periods

Some commenters stated that proposed Rule 605 and another recently adopted rule, the Settlement Cycle Adopting Release, would have interacting effects. Commenters stated that implementing the rules together would impact industry resources, or that the rules had uncertain interacting effects.[1686] The Commission acknowledges that the effects of any final rule may be impacted by recently adopted rules that precede it. Accordingly, each economic analysis in each adopting release considers an updated economic baseline that incorporates any new regulatory requirements, including compliance costs, at the time of each adoption, and considers the incremental new benefits and incremental new costs over those already resulting from the preceding rules. In some cases, resource limitations can lead to higher compliance costs when the compliance period of the rule being considered overlaps with the compliance period of other rules. In determining compliance periods, the Commission considers the benefits of the rules as well as the costs of delayed compliance periods and potential overlapping compliance periods.

The Commission acknowledges that there are compliance dates for certain requirements of the Settlement Cycle Adopting Release that overlap in time with the amended rule, which may impose costs on resource-constrained entities affected by multiple rules.[1687] The broker-dealers with compliance obligations under the Settlement Cycle Adopting Release will incur one-time costs in connection with a May 2024 compliance date for the Settlement

[1679] For example, a single letter ''a'' results in a PDF file of 7,706 bytes vs. a TXT file of 1 byte. *See, e.g., File Size,* U.S. Pat. & Trademark Off., *available at https://www.uspto.gov/patents/apply/applying-online/file-size.* However, the lower information content of the summary file PDFs and CSVs likely results in lower file sizes despite the larger per-pixel storage requirements.

[1680] 17 CFR 242.606(a)(1) and (b)(3). The Commission does not expect that the process of using a CSV schema for preparing Rule 605 summary reports will vary significantly from that of using an XML schema for preparing Rule 606 reports because, in each instance, the reporting entity must encode the required disclosures in machine-readable format (whether the simpler CSV format or the more complex XML format) according to a fixed set of rules and relationships (*i.e.,* a schema) created and maintained by the Commission, and post the resulting machine-readable document alongside a rendered PDF version on the entity's public website.

[1681] *See supra* section IX.D.1 for a discussion of the effects of these amendments on competition among reporting entities on the basis of execution quality.

[1682] For example, one commenter stated that the compliance costs associated with the reporting of fractional shares would represent a significant barrier to entry to the creation of fractional share programs by smaller broker-dealers. *See* SIFMA Letter at 31. However, based on the Commission's analysis, fractional share programs are more likely to be offered by larger broker-dealers who would fall within the customer account threshold, so the Commission does not expect this to represent an additional significant barrier to entry beyond those that already exist. *See supra* note 1659 and corresponding text for further discussion and response to this commenter.

[1683] For example, data on broker-dealers' median monthly revenues from FOCUS Report Form X–17A–5 Schedule II from Q4 2022 show that the estimated monthly compliance cost will represent 0.03% of the monthly revenues of broker-dealers with 100,000 customers or less, and 0.003% of the monthly revenues of broker-dealers with 100,000 customers or more.

[1684] The Commission does not believe that these compliance costs are large enough such that this is likely. *See supra* note 1683, describing how the compliance costs are likely to be a small percentage of broker-dealers' monthly revenue.

[1685] *See supra* section IX.C.4.a)(1) for a discussion of the structure of the market for brokerage services, and *supra* section IX.C.4.b)(1) for a discussion of the structure of the market for trading services.

[1686] *See supra* note 1051 (citing comments).

[1687] *See* section VII (compliance dates for the Rule 605 amendments); *supra* note 1050 (compliance dates for the Settlement Cycle Adopting Release).

Cycle Adopting Release,[1688] while the compliance period for the Rule 605 amendments for these broker-dealers culminates in the fall of 2025.[1689]

While the Commission received comments on the interaction of the MDI Rules and the final amendments to Rule 605, the commenters did not specifically address costs associated with overlapping compliance periods.[1690] The Commission outlined a phased transition plan for the implementation of the MDI Rules.[1691] Based on the times provided in the transition plan for implementation of the MDI Rules, the Commission estimated that the full implementation of the MDI Rules will be at least two years after the Commission's approval of the plan amendment(s) required by Rule 614(e).[1692]

The Operating Committees of the CTA/CQ Plan and UTP Plan filed the MDI Plan Amendments on November 5, 2021.[1693] The Commission disapproved the proposed amendments on September 21, 2022.[1694] As a result, the participants to the effective national market system plan(s) will need to develop and file new proposed amendments as required by Rule 614(e), before the implementation period prescribed by the phased transition plan can commence. The Commission therefore believes that the length of time affected market participants will have to come into compliance with both the MDI Rules and these amendments, and the likelihood of limited overlap in compliance periods, will mitigate compliance costs.

(b) Other Potential Costs

Some market participants may incur costs other than compliance costs as a result of these amendments to Rule 605. Many of these costs are difficult to quantify, especially as the practices of market participants are expected to evolve and may change due to the information on execution quality that is required to be reported under these amendments to Rules 605. Therefore, much of the following discussion is qualitative in nature.

(1) Costs To Reporting Entities of Improvements to Execution Quality

In addition to compliance costs, these amendments could result in costs to some reporting entities based on how market participants adjust their behavior in response to increased transparency and competition on the basis of execution quality.[1695]

First, increased transparency and competition on the basis of execution quality, and subsequent scrutiny by customers and other market participants, might make broker-dealers less likely to route orders based on payment relationships and/or fees and rebates. While this will likely benefit customers in the form of better execution quality, if broker-dealers were to reduce the order flow sent to wholesalers who pay for it, the broker-dealers will receive less payment for such order flow and might make up for the lost payments by, for example, by raising brokerage commissions or other fees on customers. The same outcome might occur if broker-dealers were to route orders to trading centers with lower rebates and higher fees. Broker-dealers may make up for lost payments or revenues at the expense of customers in other ways as well, for example, by reducing the quality of some bundled services or paying a lower interest rate on deposit accounts.

Second, increased competition on the basis of execution quality may result in costs to reporting entities to the extent that they need to update or improve their routing or execution systems in order to remain competitive. If the reporting entity is executing an order, an improvement in execution systems will correspond to a direct improvement in execution quality for its customers (that is, the cost is a transfer from the reporting entity to its customers). If the reporting entity is routing the order, then the cost of improved routing will also benefit the customer in terms of superior execution (the cost is, in part, a transfer). The reporting entity may pass some of the costs of improved routing on to its customers, reducing the benefit from improved execution quality relative to what it might otherwise have been. If the cost to the reporting entity from improvements to routing is sufficiently high, and if this cost cannot be passed on to customers, then on net, there may be costs from improved execution practices.

It is possible that the capital expenditure associated with upgrading their order routing and execution systems may be such that some reporting entities will no longer remain profitable.[1696] The Commission is unable to estimate the number of reporting entities that may leave the market as a result of no longer being able to compete with other reporting entities on the basis of execution quality because the Commission does not know how market participants will adjust their order flow based on the updated information in the amended 605 reports. The Commission acknowledges that if some reporting entities offering lower execution quality exit the market then their customers may incur costs to switch to other reporting entities.[1697] However, these customers' order execution quality may improve if they switch to reporting entities that offer better execution quality.

If reporting entities offering worse execution quality exit the market, the Commission does not believe that it will have an adverse effect on competition, either in the market for brokerage services or in the market for trading services. Both markets are served by a large number of competitors and if a reporting entity were to exit for this reason, these markets will be served by more efficient firms that are better able to offer execution quality to customers in line with their industry peers.

(2) Costs for Smaller Broker-Dealers

These amendments to Rule 605 may entail additional costs if smaller broker-

[1688] *See* Settlement Cycle Adopting Release, 88 FR 13872 at 13918, section VII (compliance date) (Mar. 6, 2023). The Commission estimated that broker-dealers serving institutional investors will incur initial compliance costs under Rule 15c6–1 to configure their trading systems, update reference data, and update trade confirmation/affirmation systems, documentation, cashiering and asset servicing functions, as applicable; but will have minimal ongoing direct compliance costs after the initial transition to a T+1 standard settlement cycle; and those also serving retail investors will face additional one-time compliance costs after the initial transition for client education and customer service. *See id.* at 13937–38, section VIII.C.5. Broker-dealers which adopt policies and procedures related to allocation, confirmation, and affirmation of transactions, instead of entering into or modify existing written agreements with relevant parties, will additionally incur initial costs to create policies and procedures, and ongoing costs related to monitoring, compliance, and documentation obligations under Rule 15c6–2. *See id.* at 13938–39.

[1689] The final rule has an effective date 60 days after its date of publication in the **Federal Register** and a compliance date 18 months after the effective date. *See* section VII, *supra.*

[1690] *See supra* notes 1006, 1638; *infra* note 1725 (citing comments).

[1691] *See* MDI Adopting Release, 86 FR 18596 at 18699–18701 (Apr. 9, 2021).

[1692] *See supra* note 1022.

[1693] *See supra* note 1023.

[1694] *See supra* note 1024.

[1695] The costs to reporting entities associated with increased transparency and competition on the basis of execution quality will likely represent a transfer from these reporting entities to other market participants.

[1696] *See, e.g.,* ModernIR Letter at 3, stating that expanding Rule 605 disclosures ''will drive yet more broker-dealers from the market.''

[1697] These costs will vary based on the reporting entity that exited the market and the services the individual customers received from the reporting entity and other entities. For example if a customer used multiple reporting entities that offered similar services, then the costs to the customer of one of these reporting exiting the market may be smaller than for a customer that used only one reporting entity that exited the market. The Commission is unable to quantify these costs because it is unable to estimate the entities that will exit the market.

dealers that are not subject to Rule 605 reporting requirements under the final rule face competitive pressure to provide customers with more information and execution quality, and incur initial and ongoing costs to voluntarily provide customers with execution quality reports.[1698] The costs for smaller broker-dealers to prepare execution quality reports may not be the same as the costs for larger broker-dealers. Smaller-broker dealers may lack the technical expertise and compliance experience of larger broker-dealers, which will tend to lead to higher costs; however, smaller broker-dealers may also have lower costs if their lower order volume and customer account numbers lead to less complexity when calculating the metrics required in the reports.

(3) Costs Due to Incentives From Reporting of Execution Quality

The Commission acknowledges that, to the extent that these amendments to Rule 605 fail to capture relevant dimensions of execution quality or cause market participants to focus on some dimensions of execution quality to the detriment of others, these amendments may reduce execution quality along certain dimensions that are relevant to some investors. The nature of execution quality as a multi-faceted concept has been a focus of academic papers, which have stated that execution quality is composed of multiple aspects or dimensions, including price and speed, among others.[1699] As stated by the Commission in the Rule 11Ac1–5 Adopting Release, different investors may have different concerns and priorities related to execution of their orders.[1700] If these amendments tend to favor certain dimensions of execution quality while excluding or neglecting others, there is a possibility that certain investor groups may be advantaged by these amendments to the disadvantage of other investor groups.

For example, if size improvement becomes a major driver of order flow, national securities exchanges may try to incentivize hidden liquidity and broker-dealers may route orders to venues with higher expected hidden orders, as size improvement measures mechanically benefit from a greater degree of hidden volume.[1701] It is possible that incentivizing hidden liquidity at the cost of displayed orders may negatively impact market quality by obscuring trading interest, making order books look thinner than they actually are. This scenario is unlikely for two reasons. First, exchanges are unlikely to incentivize hidden liquidity because they have economic incentives to promote displayed liquidity over hidden liquidity.[1702] Second, market centers may not specifically focus on promoting hidden liquidity to improve size improvement metrics because Rule 605 reports also require information, such as time-to-execution, that show other dimensions of execution quality that could be negatively affected by increases in hidden liquidity.

One commenter stated that, because of the expansion of Rule 605 reporting requirements to include larger broker-dealers, ''brokers could become less willing to accept difficult orders, or orders under challenging market conditions, in an attempt to maintain favorable summary statistics.'' [1703] To the extent that this occurs and results in delayed executions or a lack of fill, this could lower some market participants' execution quality. However, broker-dealers will continue to have competitive reasons to accept these orders, as customers whose orders are consistently rejected by a broker-dealer may find it advantageous to switch to another broker-dealer. Furthermore, broker-dealers' incentives to engage in this behavior will be limited by the fact that consumers of Rule 605 reports will be able to control for differences in several characteristics of broker-dealers' order flow, including stock mix, order size, and realized spreads. Therefore, market participants will be able to observe whether a broker-dealer's reported execution quality statistics are less favorable because they tend to handle more difficult orders, such as larger orders, those in less liquid stocks, or those with higher adverse selection.[1704]

Several commenters stated that execution quality could worsen for some market participants if the amendments result in changes in order flow as more difficult-to-handle order flow shifts to broker-dealers that previously had easier-to-handle orders.[1705] It is possible that the information contained in the amended Rule 605 reports could cause more difficult-to-handle order flow to shift to broker-dealers that have easier-to-handle orders, but it is uncertain what effects this would have on the execution quality of the easier-to-handle orders of the existing customers of these broker dealers. To the extent that such shifts in order flow occur, there is sufficient detail in Rule 605 reports to allow for customers to account for changes in order flow characteristics brought about by the amendments to Rule 605 when assessing execution quality. For example, assume that the customers of Firm A disproportionately submit larger orders, which are typically harder to execute than smaller orders,[1706] and

[1698] *See infra* section IX.D.1.d)(1) for a discussion of the impact of these amendments on smaller broker-dealers.

[1699] *See, e.g.,* Robert Battalio et al., *All Else Equal?: A Multidimensional Analysis of Retail, Market Order Execution Quality,* 6 J. Fin. Mkt. 143 (2003); Boehmer (2005); Emiliano S. Pagnotta & Thomas Philippon, *Competing on Speed,* 86 Econometrica 1067 (2018).

[1700] *See* Rule 11 Ac1–5 Adopting Release, 65 FR 75414 at 75432 (Dec. 1, 2000).

[1701] For example, if two exchanges have 200 shares available at the NBO but one exchange is hiding a portion of this interest, a market order to purchase 200 shares would record size improvement on the venue with hidden liquidity but would not on the other venue.

[1702] For example, exchanges earn market data revenue from the SIPs based on their trading activity and the proportion of time their displayed quotes are at the NBBO. The SIP market data revenue allocation formula is summarized at, *e.g.,* UTP Plan Participants, Summary of Market Data Revenue Allocation Formula, *available at http://www.utpplan.com/DOC/Revenue_Allocation_Formula.pdf* (last accessed Jan. 11, 2024).

[1703] *See* Virtu Letter at 13.

[1704] *See supra* note 1485 for how information about adverse selection can be inferred from measures of realized spreads in amended Rule 605 reports.

[1705] *See* SIFMA Letter II at 30, stating that ''the Commission does not account for any potential negative effects on execution quality caused by the shifting of order flow itself.'' The commenter gives an example of customers that shift their order flow from one broker-dealer (''Firm A'') to another (''Firm B'') because of ''perceived better execution quality at Firm B.'' In this case, the commenter states that ''the customers of Firm B are unlikely to receive better execution quality, and may receive worse execution quality,'' because ''Firm B would now receive all of the order flow from Firm A that received less favorable execution quality.'' Instead, the customers of Firm B ''may lose some of that execution quality in relative terms if the flow from Firm A improves its execution quality.'' The commenter also stated that ''the flow from Firm A may not receive any improvement as the reason for their lower execution quality could be that some broker-dealers simply have more adverse order selection.'' Another commenter similarly stated that ''[t]he Proposed Rule may lead to changes in the equilibrium mix of customer types at each broker, in ways that can result in positive or negative externalities for other investors at each broker,'' offering as an example that, ''[i]f the Proposed Rule induces retail investors with more costly to service orders to move to brokers that previously had less costly to service orders, it could cause execution quality to worsen at the broker with previously less costly to service orders.'' Virtu Letter at 9. *See also* Virtu Letter at 37, stating that the proposed amendments to Rule 605 ''may change the equilibrium mix of the brokers used by their customers, in ways that can result in positive or negative externalities for other investors . . . If the rule induces informed traders to move to brokers that previously had uninformed traders, it could cause execution quality to worsen at that broker.''

[1706] *See supra* note 984 for a discussion of why larger orders are typically more difficult to execute. This example also could apply to other differences in order flow characteristics that make execution

Continued

then view from Rule 605 reports that Firm B offers better execution quality for larger orders than Firm A, and then switch to using Firm B. It could be the case that, *in aggregate,* Firm B's execution quality statistics decline, because that broker-dealer is now handling more orders that are difficult to execute. However, because both the detailed Rule 605 reports and the summary reports contain disaggregated information by notional order size, market participants will be able to account for this order flow characteristic when assessing that broker-dealer's execution quality from its summary report.[1707] Furthermore, it is not necessarily the case that, just because a broker-dealer is handling more of a particular type of order flow that may be harder to execute, the broker-dealer will offer these orders worse execution quality. In fact, to the extent that broker-dealers may benefit from liquidity externalities or economics of scale because of handling more of this order flow, the opposite may happen instead.[1708]

One commenter stated that, to the extent that ''perceived differences in execution quality'' result in the consolidation of order flow among a smaller number of firms, this could result in a reduction in competition and harm overall execution quality.[1709] The Commission is unable to quantify the likelihood that a trading venue or a brokerage firm will cease operating because of the consolidation of order flow and the subsequent effect that this will have on competition and execution quality. However, based on the academic literature, it may be the case that the consolidation of order flow actually improves execution quality as a result of liquidity externalities.[1710]

(4) Costs To Update Best Execution Methodologies

As a result of these amendments to Rule 605, financial service providers that are subject to best execution obligations [1711] will likely reevaluate their best execution methodologies to take into account the availability of new statistics and other information that may be relevant to their decision making.[1712] This may impose a cost only to the extent that broker-dealers and/or investment advisers choose to build the required statistics into their best execution methodologies. These amendments do not, however, address and therefore do not change the existing legal standards that govern financial service providers' best execution obligations.[1713]

(5) Other Costs

One commenter stated that the enhanced reporting requirements under Rule 605 would result in ''giving away vast amounts of information to free riders,'' which would result in vulnerabilities.[1714] The same commenter expressed a similar concern that the more detailed order execution information would ''enhance certain constituents' ability to model the market,'' who then ''could use sophisticated algorithms to craft out order flow.'' [1715] The commenter did not further specify how the increase in information would increase vulnerabilities or how the more detailed information could be utilized for algorithmic trading. Given the low frequency of Rule 605 reports (*i.e.,* once per month), and high level of aggregation of these reports (*i.e.,* not order-by-order, but aggregated across order sizes and types), the risk of market participants using Rule 605 reports to, *e.g.,* infer information about other participants' trading strategies is likely to be low, particularly because only larger broker-dealers, who introduce or carry a large number of customer accounts and thus whose order flow is less traceable to any one customer account, will be required to report under amended Rule 605 requirements.[1716]

The amendment expanding the set of Rule 605 reporting entities to include larger broker-dealers could impose a cost on broker-dealer customers if those broker-dealers that voluntarily provided their customers with execution quality reports prior to these amendments stop providing these reports, which potentially contain more or different information than what these amendments require.[1717] This scenario is not very likely because customers could still request additional information or customized reports from their broker-dealers and broker-dealers may be incentivized to satisfy such requests, to the extent they did so prior to these amendments, to retain their customers.[1718]

As another potential cost, the amendments to Rule 605 may render the preexisting Rule 605 data less useful and reduce the ability of researchers to perform statistical analyses. Some Rule 605 metrics will lose comparability before and after the new reporting requirements are implemented, so that in some cases there will be two shorter data sets rather than one longer one, leading to reduced statistical power.[1719] This cost will apply for studies done over a limited period, as over time the new data will accumulate. The changes will also impact market participants' ability to compare certain categories in the reports before and after the amendment.[1720] The ability to examine the effect of changes in order execution

more difficult, such as higher adverse selection as measured by the realized spread.

[1707] To the extent that order flow shifts such that the aggregate order flow characteristics are similar across broker-dealers, the execution quality information contained in the final Rule 605 reports will still incentivize broker-dealers to compete to on the basis of execution quality.

[1708] *See supra* section IX.D.1.d)(4) for a discussion of how liquidity externalities can improve execution quality under certain circumstances but may not always be beneficial.

[1709] *See* SIFMA Letter at 30.

[1710] *See supra* section IX.D.1.d)(4) for a discussion of how liquidity externalities can improve execution quality under certain circumstances but may not always be beneficial.

[1711] *See supra* note 1099 and accompanying text.

[1712] This statement was supported by one commenter. *See* Decimus Letter at 2.

[1713] *See supra* note 1099.

[1714] *See* Data Boiler Letter at 5.

[1715] *See* Data Boiler Letter II at 1.

[1716] *See infra* section IX.E.1.a) for a discussion of information leakage as an indirect cost of a reasonable alternative requiring these smaller broker-dealers to publish Rule 605 reports.

[1717] These reports could include, for example, public reports prepared according to the FIF Template (*see supra* note 973), or private ad hoc reports the broker-dealers prepare for their customers (*see* discussion in section IX.C.2.c), *supra*).

[1718] *See, e.g.,* 2018 Rule 606 Amendments Release, 83 FR 58338 at 58403 (Nov. 19, 2018), which discusses a similar potential cost and further states that the willingness of broker-dealers to provide such customized reports to customers and the level of detail in such a report might depend on the business relationship between the broker-dealer and the customer, such as whether the customer does a large amount of business with the broker-dealer.

[1719] For example, time-to-execution metrics for some NMLOs will not be comparable, because preexisting Rule 605 required time-to-execution for NMLOs to be measured based on the time of order receipt, while Rule 605 as amended will require time-to-execution metrics for NMLOs to be measured based on the time the order becomes executable. For NMLOs submitted at or inside the NBBO, the time of order receipt is equivalent to the time of order executability. However, for NMLOs submitted outside the quote, there may be a difference between the time of order receipt and the time of order executability. Therefore, this change may impair the ability to compare the time-to-execution metrics of near-the-quote limits orders in prior Rule 605 reports to that of non-marketable limit orders in the amended Rule 605 reports.

[1720] For example, the amendments changing the order size categories from share-based to notional-based will affect market participants' ability to compare these categories before and after the amendments. Furthermore, while IOC orders were not broken out separately and thus were distributed across various order type categories in preexisting Rule 605, IOC orders will be categorized separately into marketable and non-marketable IOC categories under amended Rule 605. This will likely affect the comparability of order type categories that had a high percentage of IOC orders prior to these amendments. The amended Rule 605 reports will also include non-exempt short sales and some orders submitted pre-opening/post-closing, which were not included in preexisting Rule 605.

quality close in time to the implementation of the adopted amendments to Rule 605 will be limited because the Rule 605 data available to analyze the change will differ before and after the implementation of the amendments.[1721] The ability to aggregate across different order categories (*e.g.,* notional buckets) mitigates this cost in that aggregated metrics can be compared across preexisting and amended Rule 605.[1722] At the same time, there are some differences in the scope of Rule 605, even taking the ability to aggregate into account.[1723] Finally, this cost may also be mitigated by the existence of other data that provides relevant information on execution quality.[1724]

The Commission received comments stating that the round lot definition in the MDI Rules, once implemented, could reduce the benefits of the amendments to Rule 605; or that the amendments to Rule 605 could add to the cost of consolidated market data, an effect that could be compounded by the implemented MDI rules.[1725] The baseline against which the benefits and costs are measured incorporates the potential effects of the MDI Rules, however, given that the MDI Rules have not yet been implemented, data that will be required for a quantitative analysis of a baseline that includes the effects of the MDI Rules, and of the cost of the final Rule 605 amendments with new baseline assumptions, is not available.[1726] In further response to the comments, the new round lot definition is not expected to reduce the benefits of the amendments to Rule 605 because Rule 605 report metrics are at the individual stock level; since the new round lot definition will affect only stocks with prices of $250 or greater, the vast majority of stocks will not be affected by it.[1727] Likewise, the amendments to Rule 605 will not alter the contents or requirements of consolidated market data, so the final rule is not expected to affect the cost of consolidated market data.

3. Economic Effects on Efficiency, Competition, and Capital Formation

(a) Efficiency

The Commission believes that these amendments to Rule 605 will improve the efficiency of analyzing Rule 605 reports, which will result in improved price efficiency. Improved transparency is expected to result in an increase in competition, which, in turn, is expected to improve order execution quality and price efficiency. Investors are expected to benefit from improved execution quality as a result of these amendments, such that these investors will also likely benefit from lower transaction costs. Transaction costs reflect a friction in the trading process that limits the ability of prices to fully reflect a stock's underlying value.[1728] Such friction makes it more costly to trade and makes investing less efficient, and limits the ability of arbitrageurs or informed investors to push prices to their underlying values. Thus, transaction costs make prices less efficient. These amendments to Rule 605 are expected to improve order execution quality and reduce transaction costs. This, in turn, will reduce financial friction and improve price efficiency.

(b) Competition

As previously discussed in the benefits section of this economic analysis, the Commission believes that these amendments to Rule 605 will facilitate competition on the basis of execution quality in the markets for brokerage services and trading services.[1729] These amendments may also have additional effects on competition, such as increasing the extent to which Rule 605 reporting entities compete within other quality areas (such as rebates and transaction fees), and increasing competition in related markets (such as the market for TCA).

(1) Competition in Other Areas

An increase in the extent to which Rule 605 reporting entities compete on the basis of execution quality as a result of these amendments may also spill over to increase incentives to compete along other lines, *i.e.,* reduce fees or increase rebates (including PFOF), or offer new products or functionalities to attract customers.

First, national securities exchanges may be incentivized to increase rebates or lower fees as a result of these amendments. Exchanges compete on the basis of fees and rebates to incentivize broker-dealers to route more order flow to them.[1730] If an exchange offers the same execution quality as another reporting entity, an exchange may be incentivized to lower its transaction fees or raise its rebates in order to increase its competitive position in attracting more customers or order flow.[1731] To the extent that this occurs and to the extent that the resulting lower fees or higher rebates will be passed on to investors, this could be beneficial for investors.

Reporting entities may also be incentivized to innovate to offer new products in order to compete. For example, some broker-dealers may be incentivized to differentiate themselves by offering new functionalities that

[1721] This pertains to changes in execution quality resulting from, for example, regulatory changes. *See, e.g.,* Letter from Stephen John Berger, Managing Director, Global Head of Government & Regulatory Policy, Citadel Securities (Mar. 31, 2023) at 29 re Minimum Pricing Increments Proposing Release, *available* at *https://www.sec.gov/comments/s7-30-22/s73022-20164212-334052.pdf.*

[1722] For example, the effective spread for market and marketable limit orders reported for individual stocks may be comparable after aggregating across different order size categories. More specifically, the effective spread can be computed for the combination of market and marketable limit orders in an individual stock in preexisting Rule 605 data by aggregated across all pre-existing order size categories for market and marketable limit orders. This will be compared with the effective spread for aggregated market, marketable limit, and marketable IOC orders in amended Rule 605 data, which will be computed by aggregating across all order size categories that remain for these order types after excluding order notional size categories with fractional and odd-lot components and notional size categories for which the notional value of the order will be equivalent to an order share size of 10,000 shares or greater.

[1723] For example, the amendments to Rule 605 expand its scope to include non-exempt short sales and some orders submitted outside of market hours. Since these orders will not be in separate order type categories, it will not be possible to exclude them from amended Rule 605 reports for the purposes of comparison to preexisting Rule 605 reports.

[1724] *See* IEX Letter at 3 (''There are myriad sources of information that both regulators and market participants draw on to consider how orders are handled and how markets compete with and compare to each other.'')

[1725] *See* Schwab Letter II at 32, 34 (''The 605(a)(1) report's beyond-the-midpoint limit order category adds unnecessary complexity, as it is not a large category today, and will become de minimis with the Market Data Infrastructure ('MDI') round lot definitions . . . Further, when the MDI's new round lot definitions take effect, the percent of the time 'best available price' differs from the NBBO will be even smaller''); Fidelity Letter at 4: (''[W]e anticipate market data costs will increase in several areas under the Proposals. Market data is a critical element of the equity markets, but the SEC has not yet required the self-regulatory organizations ('SROs') to re-submit a proposal setting fees for the data content underlying consolidated market data offerings pursuant to the Commission's Market Data Infrastructure Rules ('MDIR') nor acted on simple governance reforms to help curtail market data costs'').

[1726] *See* section IX.C.1.c)(2), *infra,* discussing benefits and costs based on implementation assumptions.

[1727] *See id.*

[1728] *See* Hans R. Stoll, *Friction,* 55 J. Fin. 1479 (2000).

[1729] *See supra* section IX.D.1 for a detailed discussion of the effects of the amendments on competition in these markets on the basis of execution quality.

[1730] *See supra* section IX.C.4.b)(2) for a discussion of competition between national securities exchanges on the basis of fees and rebates.

[1731] Another possibility is that a reporting entity that offers inferior execution quality may try to compete on the basis of lower fees or higher rebates instead of improving its execution quality. To the extent that this occurs, this may limit the extent to which competition will lead to improved execution quality for the customers of these reporting entities. However, these customers will still benefit from the lower fees or higher rebates.

appeal to customers, such as the ability to trade on margin; to trade in additional asset classes, such as options; or to trade fractional shares.[1732]

(2) Competition in Related Markets

These amendments to Rule 605 can have an impact on markets other than brokerage and trading services, such as the market for TCA. For example, suppose that a customer chooses to no longer purchase TCA once the amended Rule 605 reports become available, because the customer decides that the information contained in the reports is sufficient. If fewer customers purchase TCA, this will have a negative impact on the market for third-party providers of TCA as well as third-party data vendors, because of a reduction in the demand for their services. Further, the quality of TCA provided by third parties may decrease because third-party providers of TCA may have fewer resources for the development and maintenance of their product offerings and because with fewer customers, third-party providers may have less data to use to build their models. At the same time, the quality of TCA reports may also improve if their publishers need to offer better products in order to compete with the publicly available data, and/or use the expanded information available under the final rule to offer new or better products.

(3) Interacting Rule Effects

In addition, as stated above, some commenters requested the Commission consider interactions between the economic effects of the proposed rule and other recent Commission rules.[1733] As discussed above, the Commission acknowledges that overlapping compliance periods may in some cases increase costs.[1734] This may be particularly true for smaller entities with more limited compliance resources.[1735] This effect can negatively impact competition because these entities may be less able to absorb or pass on these additional costs, making it more difficult for them to remain in business or compete. However, the rules highlighted by commenters have compliance dates that do not significantly overlap with the expected industry compliance dates of the amendments to Rule 605, and therefore we do not expect these effects on competition to be significant.[1736] We acknowledge that to the extent such overlap (in scope or timing) occurs, there could be costs which could affect competition, but we do not expect these costs to be significant.

(c) Capital Formation

These amendments to Rule 605 might promote capital formation by improving price efficiency. As discussed above, these amendments are expected to improve order execution quality and reduce transaction costs, which is expected to improve price efficiency, and to reduce financial friction and promote investors' ability to trade. Financial friction in the form of higher transaction costs can limit trading activity, and thereby hinder the efficient adjustment of prices and limit the ability of prices to reflect fundamental values. Less efficient prices can result in some issuers experiencing a cost of capital that is higher or lower than if their prices fully reflected underlying values, as a result of the market's incomplete information about the value of the issuer. This, in turn, may limit efficient allocation of capital and capital formation. Under these amendments, improved price efficiency is expected to cause firms' stock prices to reflect their underlying values more accurately, which can improve capital allocation and promote capital formation.

E. Reasonable Alternatives

1. Reasonable Alternative Modifications to Reporting Entities

(a) Different Customer Account Thresholds for Differentiating Larger Broker-Dealers

The Commission considered alternatives to the adopted amendment, which requires larger broker-dealers [1737] to prepare execution quality reports pursuant to Rule 605 and excludes broker-dealers that introduce or carry less than a threshold number of customer accounts, defining the customer account threshold as 100,000 customer accounts.[1738] Lowering this threshold would increase the total costs of the proposed amendments, as more broker-dealers would be subject to the costs of preparing Rule 605 reports; however, lowering the threshold might also be beneficial if more broker-dealer customers are able to benefit from the proposed modifications to reporting entities.[1739] On the other hand, raising the customer account threshold would lower the total costs of the proposal, but might result in fewer broker-dealer customers benefiting from the proposed modifications to reporting entities.[1740]

In order to examine the number of broker-dealers that would be subject to Rule 605 reporting requirements under the final rule at different customer account thresholds, it is first necessary to estimate the number of customers both for carrying and for introducing broker-dealers.[1741] To estimate the number of carrying broker-dealers' customers, the Commission used data from broker-dealers' 2022 FOCUS Report Form X–17A–5 Schedule I, which asks respondents whether they carry their own public customer accounts, along with the number of carrying broker-dealers' public customer accounts.[1742] To estimate the number of introducing broker-dealers' customers, the Commission used data from CAT during the calendar year 2022 on the number of unique customer accounts whose order originations are associated with broker-dealers that do not identify as carrying their own public customer accounts in FOCUS Report Form X–17A–5 Schedule I.[1743] The resulting

[1732] *See, e.g., supra* note 1140, describing how trading volume increased substantially for brokers after they introduced the use of fractional shares.

[1733] *See supra* section IX.C.1.d).

[1734] *See supra* section IX.D.2.a)(5).

[1735] *See supra* section IX.D.2.a)(4) (discussing generally the competitive effect of fixed and variable compliance costs on smaller reporting entities). This issue may be mitigated by the fact that Rule 605 reporting requirements will only apply to larger broker-dealers. In addition, the Commission has estimated that, of the firms that will be impacted by the amendments, only one exchange market maker is a ''small entity'' within the meaning of the Regulatory Flexibility Act. *See infra* section X.

[1736] *See supra* section IX.D.2.a)(5).

[1737] *See supra* note 61 defining the term ''larger broker-dealers.''

[1738] *See supra* section II.A.2.a) discussing the adopted customer account threshold.

[1739] *See supra* section IX.D.1.d)(1) for a discussion of the extent to which excluding smaller-brokers dealers (*i.e.,* those broker-dealers with customer accounts numbers below the customer account threshold) limits the benefits of the enhanced reporting requirements on competition for customer order flow.

[1740] While one commenter supported the 100,000 customer account threshold (*see* Nasdaq Letter at 43), and several commenters supported expanding reporting requirements to all broker-dealers (*see infra* section IX.E.1.b), the Commission did not receive comments supporting alternative customer account thresholds.

[1741] *See supra* note 98 and accompanying text for a definition of carrying and introducing broker-dealers.

[1742] Specifically, item 8080 asks for information on ''respondent's total number of public customer accounts,'' but only broker-dealers that are carrying firms are required to answer this question, so information on introducing broker-dealers' customers is not included.

[1743] Customer accounts are identified in CAT as accounts belonging to either the ''Institutional Customer'' account type, defined as accounts that meet the definition in FINRA Rule 4512(c), or the ''Individual Customer'' account holder type, defined as accounts that do not meet the definition in FINRA Rule 4512(c) and are also not a proprietary account. *See supra* note 1144 for more information about account types in CAT. Broker-dealers are identified according to their FDID as defined in section 1.1 of the CAT NMS Plan. Introducing broker-dealers are identified as those broker-dealers that originate orders from customer accounts in the CAT dataset and do not identify as carrying their own public customer accounts in FOCUS Report Form X–17A–5 Schedule I.

customer numbers are then used to estimate the number of both carrying and introducing broker-dealers that would be subject to the reporting requirements of Rule 605 as proposed, using various definitions of the customer account threshold. The estimated costs of these amendments from the various definitions of the customer account thresholds are then calculated using the estimated initial and ongoing costs for new Rule 605 filers.[1744]

Lowering the customer account threshold might be beneficial if more broker-dealer customer accountholders are able to benefit from the enhanced reporting requirements. To estimate the benefits of different customer account thresholds, the Commission calculated the cumulative number of customer accounts (expressed as a percentage of all identified carrying and introducing broker-dealer customer accounts) associated with broker-dealers that will be subject to the amended reporting requirements of Rule 605 according to various definitions of the customer account threshold. Additionally, using estimates of the number of orders that originate from institutional or individual accounts at broker-dealers as identified in CAT,[1745] the Commission calculated the cumulative percentage of customer order originations associated with broker-dealers that would be included under the various thresholds.[1746]

Table 13 [1747] presents the estimated number of broker-dealers (both carrying and introducing) that would be subject to Rule 605 reporting requirements according to different customer account thresholds, the resulting estimated costs, and the resulting estimated benefits in terms of the cumulative percentage of included customer accounts and orders. The table shows that increasing the customer account threshold from 100,000 to 250,000 would reduce both the initial and ongoing costs of the amendments by around 41.7%,[1748] but would also result in lower coverage. In particular, coverage of customer order originations would drop by 55.7 percentage points.

Meanwhile, reducing the customer account threshold from 100,000 to 10,000 would increase the coverage of customer order originations by an additional 21.0 percentage points. However, it would significantly increase both the initial and ongoing compliance costs, which would increase by approximately 187%.[1749] The Commission also understands that accounts of broker-dealers with fewer customers are more likely to belong to institutional traders,[1750] who are likely to have access to alternative information about the execution quality achieved by their broker-dealers and/or are likely to make use of not held orders that are excluded from Rule 605 reporting requirements, and would therefore be less likely to depend on Rule 605 reports for information about their broker-dealers' execution quality.[1751] Therefore, lowering the customer account threshold to include these customers might not be particularly beneficial, especially when compared to the substantial increase in compliance costs.

However, a customer account is only observed in this dataset if it actually originated orders during the sample period from Jan. to Dec. 2022. Therefore, to the extent that there are customer accounts that did not originate orders during this period, these accounts would be missing from our sample. In order to adjust for these missing accounts, an adjustment factor was constructed based on the assumption that, for carrying broker-dealers identified in both FOCUS and CAT, the number of customer accounts associated with the broker-dealer in CAT represents some percentage of that broker-dealer's total customer base available from FOCUS (*i.e.,* those customer accounts that actually originated orders during 2022). Dividing the number of accounts from CAT by the number of customer accounts from FOCUS reveals that, on average, around 26.6% of these broker-dealers' customer accounts traded during 2022. Observed customer numbers from CAT are then scaled up using the adjustment factor of $1/0.266$ to estimate the total number of customers for each broker-dealer (both carrying and introducing). In order to ensure that this estimate of customer account numbers is as conservative as possible, if a broker-dealer is observed in both datasets, the number of customers for that broker-dealer is taken as the higher of its customer account number reported in FOCUS and the adjusted number of customers estimated from CAT. This method may underestimate the total number of customers to the extent that carrying broker-dealers identified in FOCUS introduce customers that they do not carry (*see supra* note 1278 discussing hybrid carrying/introducing broker-dealers), and/or that introducing broker-dealers would have a higher or lower adjustment factor than carrying broker-dealers. This method may also underestimate or overestimate any particular broker-dealer's total number of customers to the extent that a larger or smaller portion of the broker-dealer's customer base originated orders during the sample period than the number implied by the adjustment factor. Lastly, this method may underestimate the number of customer accounts to the extent that some broker-dealers introduce customer accounts on an omnibus basis, which pools together the accounts of potentially multiple underlying customers but would only be recorded as a single account in CAT.

[1744] *See supra* section VIII.D for a description of these costs. This analysis assumes the same costs for both larger and smaller broker-dealers.

[1745] This is estimated as the total number of order originations associated with a broker-dealer's institutional and individual customer accounts identified in CAT during calendar year 2022. *See supra* note 1743 for more information about how these accounts are identified.

[1746] Some of these order originations are likely to be excluded from Rule 605 reporting requirements to the extent that they belong to an order type or size group that is not subject to Rule 605.

[1747] This analysis has been updated since the Proposing Release in several ways. First, to measure the scope of broker-dealer customer activity that would be included in Rule 605 reports according to different definitions of the customer account threshold, the Proposing Release used data from broker-dealers' 2021 FOCUS Report Form X–17A–5 Schedule I and CAT data from calendar year 2021. The updated analysis in Table 13 below uses more recently available data from calendar year 2022. *See supra* note 1743 for further discussion; *see also* Proposing Release, 88 FR 3786 at 3885, n.1008 (Jan. 20, 2023). The customer account thresholds have also been updated since the Proposing Release to provide additional granularity on the costs and percentage of customers that would be covered by extending the rule to cover broker-dealers with between 250,000 and 500,000 customer accounts. Finally, the Proposing Release included a statistic, labeled ''Customer Transactions Included,'' that was calculated by taking the higher of the number of broker-dealer's customer transactions as reported in FOCUS or the number of order originations from the broker-dealer's institutional and individual customer accounts observed in CAT and then summing across broker-dealers. The Proposing Release describes the methodology as using the number of transactions observed in CAT, although order data was actually used. *See* Proposing Release, 88 FR 3786 at 3886, n.1010, 3887 (tbl.13) (Jan. 20, 2023). Upon further review, the Commission believes that order originations are the appropriate way to assess changes in the scope of Rule 605 as the threshold changes. This is because Rule 605 requires the reporting of all covered orders, regardless of whether they result in a transaction; *see, e.g.,* final Rule 605(a), requiring reporting entities to prepare ''a report on the covered *orders* in NMS stocks that it received for execution . . .'' (emphasis added). In the updated Table 13, we therefore continue to use the total number of order originations associated with a broker-dealer's institutional and individual customer accounts observed in CAT. As FOCUS does not include information on order originations, we have not included it in updated Table 13. Therefore, changes to the data and methodology did not affect the Commission's conclusions from this analysis relative to the Proposing Release; namely, the updated data analysis continues to support a 100,000-customer threshold.

[1748] Increasing the customer account threshold from 100,000 to 250,000 would reduce the initial compliance costs from $3,412,750 to $2,409,000 and the ongoing compliance costs from $4,390,080 to $3,098,880.

[1749] Reducing the customer account threshold from 100,000 to 10,000 would increase the initial compliance costs from $3,412,750 to $9,796,600 and the ongoing compliance costs from $4,390,080 to $12,602,112.

[1750] For example, data from CAT order originations reveals that broker-dealers with less than 100,000 customers have a higher percentage of institutional accounts on average than broker-dealers with 100,000 or more customer accounts.

[1751] *See supra* section IX.C.2.c) for a discussion of institutional investors' access to alternative sources of execution quality other than Rule 605 reports.

Table 13: Cost-Benefit Analysis of Different Customer Account Thresholds Defining "Larger Broker-Dealers"

Customer Account Threshold	Number of Broker Dealers			Estimated Compliance Costs		CAT Order Originations Included (%)	Customer Accounts Included
	Carrying	Introducing	Total	Initial	Ongoing		
500,000	28	16	44	$1,766,600	$2,272,512	4.80%	95.80%
250,000	35	25	60	$2,409,000	$3,098,880	4.80%	97.20%
100,000	46	39	85	$3,412,750	$4,390,080	60.50%	98.30%
10,000	74	170	244	$9,796,600	$12,602,112	81.50%	99.70%
1,000	104	498	602	$24,170,300	$31,092,096	84.70%	100.00%
100	130	847	977	$39,226,550	$50,460,096	93.90%	100.00%
10	142	1025	1167	$46,855,050	$60,273,216	94.00%	100.00%
1	153	1092	1245	$49,986,750	$64,301,760	100.00%	100.00%

This table presents the estimated number of broker-dealers that would be subject to Rule 605 reporting requirements according to different definitions of the customer account threshold. The number of customer accounts are estimated from 2022 FOCUS Report Form X-17A-5 Schedule I and CAT data for the calendar year 2022, using the methodology described in supra note 1743. CAT order originations are the total number of order originations from institutional or individual accounts associated with a broker-dealer, summed across all stocks and days in the sample. See supra note 1743 for further details on methodology. Compliance costs are estimated using the per-respondent costs from section VIII.D.

An indirect cost of requiring these smaller broker-dealers to publish Rule 605 reports is an increased risk of information leakage. To the extent that a broker-dealer serves multiple institutional investors and/or these institutional investors exclusively use not held orders, it might be difficult to identify the orders of a particular customer in the amended Rule 605 reports. However, a smaller broker-dealer might have only a few institutional investor customers that represent the majority of its business and this might be known to other market participants. In this case, it might be possible to learn from Rule 605 reports some information about the customer's order flow that is handled by the specific broker-dealer. This information will only pertain to historical order flow and will only include a possibly limited subset of the customer's orders that are held orders, but could nevertheless provide information about the general characteristics of the customer's order flow, which might be useful to other market participants. Such a potential outcome could put smaller broker-dealers (that is, those with a small set of customers or handling a relatively small number of institutional orders) at a competitive disadvantage relative to larger broker-dealers, as institutional investors might avoid using smaller broker-dealers to avoid possible disclosure that could be traced back to the customer.

(b) Require All Broker-Dealers To Prepare Rule 605 Reports

Another alternative to the adopted amendment to require larger broker-dealers to prepare execution quality reports pursuant to Rule 605 is to require all broker-dealers to prepare such reports, excluding broker-dealers with de minimis order flow. Several commenters supported this alternative.[1752]

Expanding reporting requirements to all broker-dealers, subject to a de minimis threshold, would greatly increase the scope of these amendments, as there were 3,494 registered broker-dealers as of Q2 2023.[1753] However, only around a third (specifically, 1,245) of these broker-dealers introduced or carried at least one individual and/or institutional investor in the market for NMS stocks within the sample time period.[1754] The Commission is mindful of the additional costs that broad expansion of the rule to all broker-dealers would entail, relative to the likely limited benefits of expanding reporting requirements to a substantial number of broker-dealers that do not directly handle, and thus have less discretion over the execution quality of, individual and institutional investors' orders. Therefore, it is likely that the increase in cost that would accompany a requirement for all broker-dealers to prepare Rule 605 reports, subject to a de minimis threshold, would not be justified by the corresponding benefit, and that limiting reporting obligations to broker-dealers that handle customer orders will focus the associated implementation costs on those broker-dealers for which the availability of more specific execution quality statistics would provide a greater benefit. One commenter stated that only 6.7% of broker-dealers that carry or introduce at least one customer account would be required to prepare Rule 605 reports.[1755] However, as discussed above, these broker-dealers, while a relatively small percentage of broker-dealers, are responsible for the vast majority (more than 98%) of customer accounts, as well as a significant percentage (59.5%) of customer order flow.[1756]

[1752] *See, e.g.,* Robinhood Letter at 44; Angel Letter at 3.

[1753] *See supra* section IX.C.4.a)(1). In addition, based on Q2 2021 data, the Commission stated in the Proposing Release that there were 3,498 registered broker-dealers with only around a third (specifically, 1,267) of these broker dealers introducing or carrying at least one individual and/or institutional investor in the market for NMS stocks within the sample time period. *See* Proposing Release, 88 FR 3786 at 3887 (Jan. 20, 2023). These numbers are comparable to the ones in this adopting release.

[1754] *See* analysis in *supra* Table 13 for estimated number of broker-dealers that introduce or carry at least one customer account.

[1755] *See* Robinhood Letter at 44.

[1756] *See* Table 13 and corresponding discussion.

(c) Defining the Threshold for Differentiating Larger Broker-Dealers Using Number of Customer Transactions Rather Than Number of Customer Accounts

The Commission also considered defining the threshold for differentiating larger broker-dealers using number of customer transactions rather than number of customer accounts. An approach requiring that broker-dealers handling above a threshold level of customer transactions publish Rule 605 reports would likely capture an overall larger number of customer orders. However, it would also be subject to a number of issues that would limit the benefits of this approach. The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1757]

First, this approach would likely exclude from reporting requirements broker-dealers that have a large number of relatively inactive customer accounts, and include broker-dealers that have a small number of accounts associated with large amounts of trading volume. While the former are likely to be accounts belonging to individual investors, the latter are very likely to be institutional accounts. Institutional investors are likely to have access to alternative information about the execution quality achieved by their broker-dealers and/or are likely to make use of not held orders that are excluded from Rule 605 reporting requirements, and would therefore be less likely to depend on Rule 605 reports for information about their broker-dealers' execution quality.[1758] Meanwhile, individual investors have fewer alternatives to Rule 605 for information about the execution quality achieved by their broker-dealers.[1759] Therefore, while expanding overall coverage, defining the threshold using the number of customer transactions would be less likely to target the types of orders that might be most useful for consumers of Rule 605 reports.

Second, defining the threshold using the number of customer transactions might result in a less stable classification of broker-dealers into those that are and are not subject to Rule 605 requirements, as there is likely to be more month-to-month variation in transaction numbers resulting from changes in market conditions, as compared to number of customer accounts.[1760] This could potentially be disruptive to broker-dealers, who would have to coordinate compliance with Rule 605 during some periods but not others and interfere with customers' or market participants' ability to look at a broker-dealer's execution quality over time by analyzing historical data. Furthermore, the dependence of transaction volumes on market conditions might result in broker-dealers being newly defined as ''larger broker-dealers'' subject to reporting requirements, even though their size relative to other broker-dealers did not change. For example, a period of sustained market volatility resulting in overall increases in market activity levels might trigger the need for many or even most broker-dealers to file Rule 605 reports, even if the broker-dealer's relative portion of order flow (as a percentage of total broker-dealer customer order flow) did not change.[1761] This would increase the total compliance costs associated with the amendments to Rule 605.

Lastly, the number of customer accounts is likely less costly for broker-dealers to calculate and track compared to the number of transactions associated with customer accounts. Given that around 88.1% of customer-carrying broker-dealers reported the actual number of their customer transactions (rather than an estimated number) on their FOCUS Report Form X–17A–5 Schedule I in 2022,[1762] the extent to which broker-dealers would be able or choose to track the number of transactions associated with their customer accounts is unclear.

2. Reasonable Alternative Modifications To Scope of Covered Orders

(a) Explicitly Include ISO Orders With Limit Prices Inferior to the NBBO

Both prior to and after these amendments, marketable Intermarket Sweep Orders (''ISOs'') with a limit price inferior to the NBBO, *i.e.,* an ISO with a limit price less than the national best bid for sell orders or higher than the national best offer for buy orders, may be viewed as being subject to special handling, which will exclude them from Rule 605 reports.[1763] The Commission considered an alternative to explicitly include these orders within the scope of covered orders, either aggregated with other order types or as a separate order type category. The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1764]

ISOs make up a large percentage of on-exchange trade volume; one academic working paper found that, between January 2019 and April 2021, ISOs accounted for 48% of on-exchange trade volume.[1765] In order to estimate the volume of ISOs that are excluded from Rule 605 reporting requirements as a result of the exclusion of ISOs with inferior limit prices, an analysis was performed using data on ISO marketable limit orders from the Tick Size Pilot B.II Market and Marketable Limit Order

[1757] *See* Proposing Release, 88 FR 3786 at 3888 (Jan. 20, 2023).

[1758] *See* section IX.C.2.c) for a discussion of institutional investors' access to alternative sources of execution quality information other than Rule 605 reports.

[1759] *See* section IX.C.2.b) for a discussion of individual investors' usage of Rule 605 reports.

[1760] This possibility is somewhat limited by the adopted amendment requiring a broker or dealer that equals or exceeds the customer account threshold to provide reports for at least three calendar months. *See supra* section II.A.2.

[1761] This possibility would be somewhat limited by the adopted amendment requiring broker-dealers to publish Rule 605 reports only after a three-month initial grace period. *See supra* section II.A.2.

[1762] This number was calculated by dividing the number of broker-dealers that answered ''yes'' to items I8084 (''Respondent carries its own public customer accounts'') and I8105 (''Actual number of respondent's public customer transactions'') and that reported at least one customer transaction, by the total number of broker-dealers that answered ''yes'' to item I8084 and reported at least one customer transaction. *See supra* note 1746 for a description of FOCUS Report Form X–17A–5 Schedule I. The Proposing Release included a similar analysis using 2021 FOCUS Report Form X–17A–5 Schedule I that looked that customer-carrying broker dealers that reported the actual number of respondent's public customer transactions, but did not control for whether the respondent reported at least one customer transaction (*i.e.,* it additionally includes broker-dealers that reported no transactions during the calendar year). Using 2022 FOCUS Report Form X–17A–5 Schedule I, this number is 47.7%, which is similar to the number from the Proposing Release. *See* Proposing Release, 88 FR 3786 at 3888 (Jan. 20, 2023). The Commission has adjusted its methodology to control for the number of broker-dealers that report at least one customer transaction in order to achieve a more conservative estimate of broker-dealers that will face costs from updating their systems to record transaction information. It is unlikely that broker-dealers that report actual transaction numbers of zero, to the extent that they continue to not handle any transactions, will need to update their systems in this way for the purposes of tracking customer transactions. While these methodologies produce different numbers, they both support the idea that the extent to which broker-dealers will be able or choose to track the number of transactions associated with their customer accounts is unclear.

[1763] *See supra* note 4, discussing the exclusion of orders for which the customer requests special handling from the definition of ''covered orders.'' *See also* 2013 FAQs, answer to Question 1.

[1764] *See* Proposing Release, 88 FR 3786 at 3888 (Jan. 20, 2023).

[1765] *See* Ariel Lohr, *Sweep Orders and the Costs of Market Fragmentation* (Sept. 18, 2021), *available at https://ssrn.com/abstract=3926296* (retrieved from SSRN Elsevier database).

dataset.[1766] Table 13 [1767] shows that ISO orders with limit prices inferior to the NBBO make up 4.9% of ISO buy orders (6.3% of buy share volume), and 4.7% of ISO sell orders (9.0% of ISO sell volume). Therefore, it could be the case that these orders make up a small but non-negligible percent of order flow.[1768]

Table 14: Marketable Intermarket Sweep Orders by Price Relative to NBBO, Mar. 2019

Percent of Orders	**ISO Buy Orders**	**ISO Sell Orders**
Price Equal to the NBBO	95.1%	95.2%
Price Worse Than NBBO	4.9%	4.7%
Price Better Than NBBO	0.05%	0.06%
Percent of Share Volume	**ISO Buy Orders**	**ISO Sell Orders**
Price Equal to the NBBO	93.5%	90.1%
Price Worse Than NBBO	6.3%	9.0%
Price Better Than NBBO	0.2%	0.9%

This table shows the percentage of ISO marketable limit orders with limit prices inferior to the NBBO, equal to the NBBO, and better than the NBBO, using a randomly selected sample of 100 stocks from the Tick Size Pilot B.II Market and Marketable Limit Order dataset and for the time period of Mar. 2019. Percentages are calculated as the number of shares (resp. orders) submitted with an ISO designation and within a given price type (i.e., priced equal to, worse than, or better than the NBBO), divided by the total number of shares (resp. orders) submitted with an ISO designation. Results are calculated and presented separately for buy and sell orders. See supra note 1545 for dataset description. The numbers reported here, in particular those related to the NBBO, may change once the amendments in the MDI Adopting Release are implemented. See supra note 1766 and section IX.C.1.c)(2).

However, there are questions as to whether ISOs with inferior limit prices would be comparable to other marketable limit orders. When the limit price of an ISO is inferior to the NBBO at time of order receipt, the customer is effectively instructing the trading center that it can execute the order at a price inferior to the NBBO. If the order executes, any adverse effects that this inferior limit price has on the order's execution quality metrics (*e.g.,* a negative price improvement, or a higher effective spread) would be a result of the customer's instructions, rather than the market center or broker-dealer's discretion. As a result, these orders are likely to skew execution quality metrics downwards if included with other order types, which would harm market participants' ability to use these metrics to accurately compare reporting entities.

One alternative could be to explicitly include ISOs with inferior limit prices as a separate order type category in Rule 605 reports. However, the instruction that a market center should execute an ISO order at a price inferior to the NBBO, even when other market centers are displaying liquidity at better prices, limits broker-dealers' discretion over the execution price of these orders. Thus, market participants might only benefit from this information to the extent that market centers or broker-dealers still have some discretion over some dimension of the order's execution quality such that this information would be useful in comparing metrics across reporting entities.[1769]

(b) Exclude Orders That Are Cancelled Quickly After Submission

Limit orders that are canceled within a very short amount of time after submission are likely driven by trading strategies (for example, high frequency trading[1770] and ''pinging'') that are not intended to provide liquidity, and therefore might have limited information about the execution quality of a particular market center. Excluding quickly cancelled orders from the definition of ''covered order'' might allow fill rates (*i.e.,* number of shares executed at or away from the market center, divided by number of covered shares) to better capture the execution probability of resting orders that are given a minimum opportunity to be executed, leading to a more meaningful ranking of Rule 605 reporting entities. At the same time, excluding cancelled orders also might entail losing important information if these cancellations capture information about orders that did not or could not receive a fill, rather than trading strategies. The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1771]

[1766] *See supra* note 1545 for dataset description. For the analysis of ISO orders, the Commission limited this analysis to a randomly selected sample of 100 stocks and for the time period of Mar. 2019. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers may differ following the implementation of the MDI Rules. In particular, for stocks with prices over $250, quoted spreads and price improvement statistics are expected to narrow because they will be measured against a narrower NBBO. The effects on effective spread, price impact, and realized spread statistics in these stocks is uncertain, because they are measured against the NBBO midpoint, and the Commission is uncertain how this will be affected. *See supra* section IX.C.1.c)(2). However, the Commission does not anticipate that the existence of a negative relation between the retail brokers' adverse selection risk and the execution quality that they receive from wholesalers described here would be affected by the implementation of the MDI Rules.

[1767] The same table can be found in the Proposing Release. *See* Table 14 in the Proposing Release, 88 FR 3786 at 3888 (Jan. 20, 2023).

[1768] As the Tick Size Pilot covered only small-cap stocks (*i.e.,* NMS common stocks that have a market capitalization of $3 billion or less, a closing price of at least $2.00, and a consolidated average daily volume of one million shares or less), ISO volumes and properties may be different for mid- or large-cap stocks. Furthermore, as the Tick Size Pilot data are based on self-reported data by trading centers, there is the possibility that the data may be subject to certain errors or omissions.

[1769] For example, the willingness of traders to accept prices worse than the NBBO could help illuminate the premium paid by traders to quickly trade in a fragmented trading environment, which could differ across market centers.

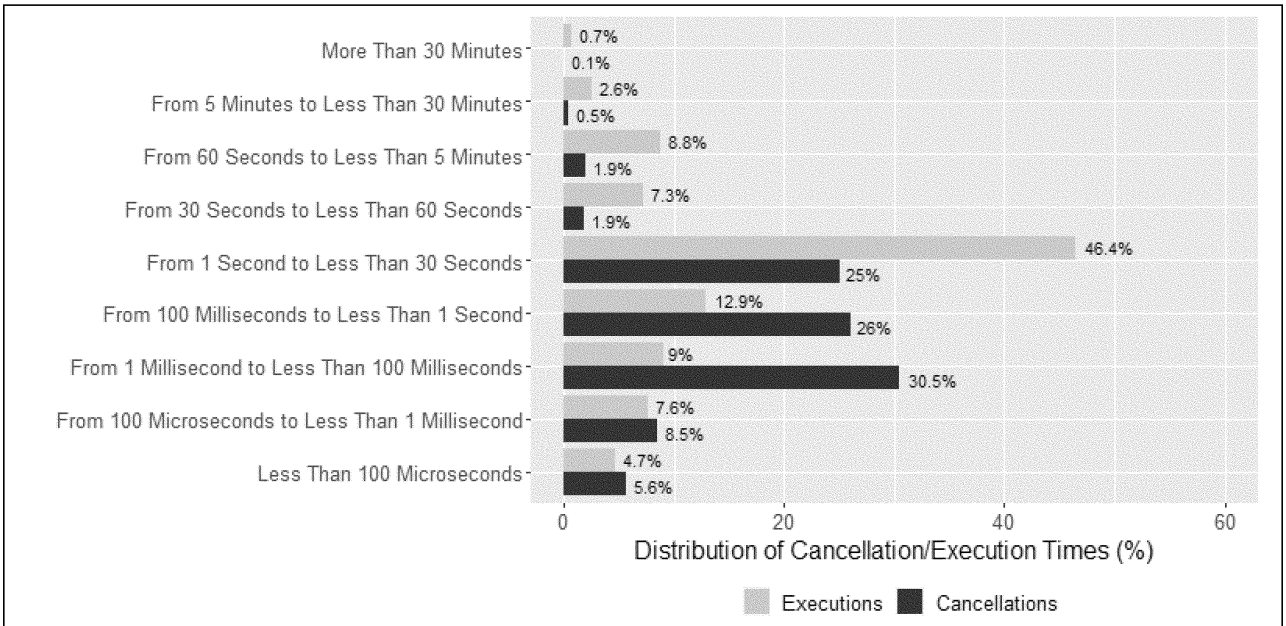
[1770] The Concept Release on Equity Market Structure states that ''the submission of numerous orders that are cancelled shortly after submission'' is a primary characteristic of high-frequency traders. *See* 75 FR 3594 at 3606 (Jan. 21, 2010).

[1771] *See* Proposing Release, 88 FR 3786 at 3888 (Jan. 20, 2023).

In order to examine how the presence of quickly cancelled orders might impact fill rates and subsequently impact the ranking of market centers, the Commission first examined data on cancellation and execution times of executable NMLOs from MIDAS during the month of March 2023.[1772] Figure 24 [1773] plots the conditional distribution of cancellation and execution times,[1774] and shows that cancellation times tend to be shorter than execution times: while the largest percentage (30.5%) of cancelled executable NMLOs are cancelled between 1 and 100 milliseconds after submission, the largest percentage (46.4%) of executable NMLOs that received execution are not executed until between 1 and 30 seconds after submission. In fact, while 70.6% of cancelled orders are cancelled in less than 1 second, only 34.2% of executions happen within the same time frame. This imbalance implies that many orders may be cancelled before they are given a reasonable opportunity to execute.

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Figure 24: Distribution of Execution and Cancellation Times for Executable NMLOs, Mar. 2023



This figure plots the distribution of execution and cancellation times across various time categories, using data from MIDAS. See supra note 1130 for data description. Percentages are calculated as the number of shares that executed (resp. cancelled) within a particular time horizon, summed across all stocks and days in the sample, divided by the total number of executed (resp. cancelled) shares, summed across all stocks and days. Execution times and cancellation times are calculated as the time of order receipt to the first time that one or more of the order's shares are executed, or the first time that one or more of the order's shares are cancelled, respectively.

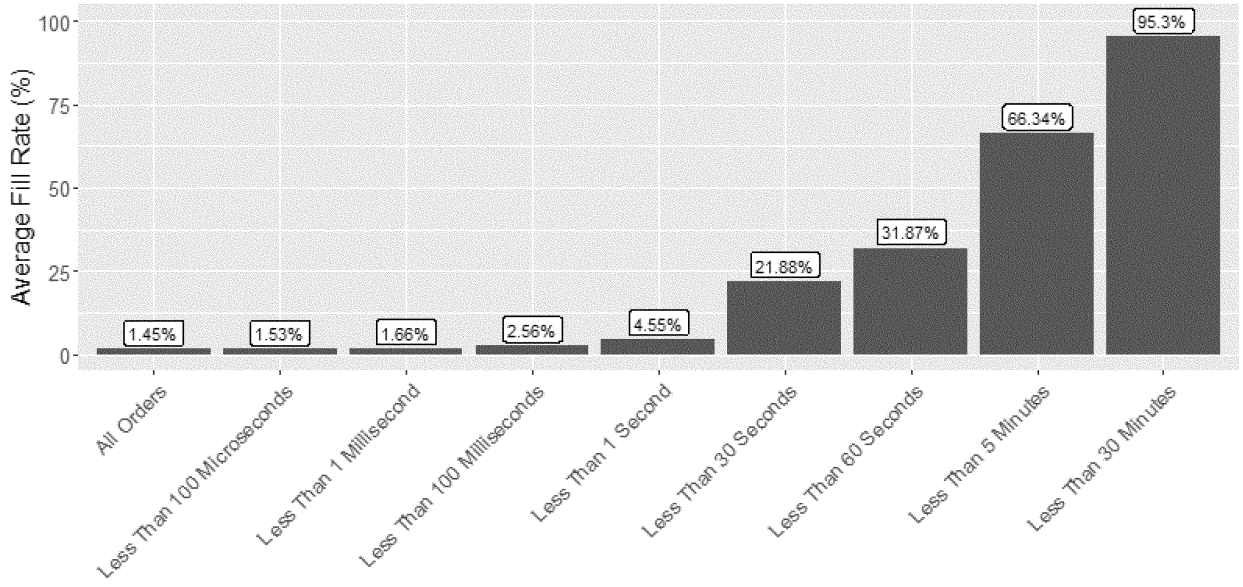
[1772] *See supra* note 1130 for data description. This analysis does not include IOC NMLOs, which are not captured in MIDAS metrics. As discussed in *supra* section IX.C.3.c)(9), these orders may have contributed to low fill rates in reports under preexisting Rule 605. Execution times and cancellations times are calculated from the time of order receipt to the first time that one or more of the order's shares are executed, or the first time that one or more of the order's shares are cancelled, respectively.

[1773] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons discussed in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3890 (Figure 16), 3842, n.634 (Jan. 20, 2023) (for data description). The numbers in the Proposing Release are similar: while the largest percentage (29.8%) of cancelled executable NMLOs are cancelled between 1 and 100 milliseconds after submission, the largest percentage (44.8%) of executable NMLOs that received execution are not executed until between 1 and 30 seconds after submission; and that while 75% of cancelled orders are cancelled in less than 1 second, only 41.1% of executions happen within the same time frame. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that many orders may be cancelled before they are given a reasonable opportunity to execute.

[1774] The conditional distribution examines the percentage of cancelled (executed) orders that are cancelled (executed) within the defined time thresholds, and not the percentage of all orders that are cancelled or executed within the defined thresholds. Therefore, the cancellation (execution) percentages plotted in the Figure should sum up to 100%.

Therefore, it might be the case that excluding orders cancelled below some minimum threshold might lead to more informative fill rates. However, one question might be how to determine this threshold. For example, if the intent is to exclude cancellations that are part of high-frequency trading strategies such as pinging, it might be useful to keep in mind that estimates of human reaction time range from between one second and several hundred milliseconds, setting an upper bound for what might be considered high-frequency trading.[1775] Meanwhile, one recent academic paper found that high frequency trading strategies operate in approximately 5 to 10 microseconds.[1776] This would imply that a useful range for determining an appropriate threshold might be between approximately a few microseconds and one second. Figure 25 [1777] plots the fill rates [1778] of executable NMLOs that result from excluding orders that are cancelled below a variety of minimum time thresholds, showing that fill rates increase and approach 100% as more and more cancelled orders are excluded from the calculation of the fill rate. Importantly, fill rates do not change much when orders cancelled in less than 100 microseconds, increasing by less than 0.1%. Fill rates increase when orders cancelled in less than 1 second are excluded, but still remain on the lower side at 4.55%. This implies that the impact of excluding quickly cancelled orders on fill rates might be limited.[1779]

Figure 25: Effect of Excluding Quickly Cancelled Orders on Fill Rates for Executable NMLOs, Mar. 2023



This figure plots the fill rates of executable NMLOs that result from excluding orders that are cancelled below a variety of minimum time thresholds using data from MIDAS. See supra note 1130 for data description. Cancellations times are calculated as the time of order receipt to the first time that one or more of the order's shares are cancelled. Fill rates are calculated as the number of shares that execute summed across all stocks and days in the sample, divided by the number of submitted shares excluding shares that are canceled within a given time frame, summed across all stocks and days.

[1775] *See, e.g.,* Neil Johnson et al., *Abrupt Rise of New Machine Ecology Beyond Human Response Time,* 3 Sci. Reps. 1 (2013); Albert Menkveld & Marius A. Zoican, *Need for Speed? Exchange Latency and Liquidity,* Rev. Fin. Stud. 1188 (2017).

[1776] *See* Aquilina et al.

[1777] The MIDAS data used in this analysis have been updated and corrected since the Proposing Release for the reasons described in *supra* note 1130. *See* Proposing Release, 88 FR 3786 at 3891 (fig. 17), 3842, n.634 (Jan. 20, 2023) (for data description). The analysis in the Proposing Release found similar results: fill rates increase and approach 100% as more and more cancelled orders are excluded from the calculation of the fill rate, and do not change much when orders cancelled in less than 100 microseconds (only increasing by 0.2%). Fill rates increase when orders cancelled in less than 1 second are excluded, but still remain on the lower side at 11.5%. Therefore, changes to the MIDAS dataset did not affect the Commission's conclusions from this analysis relative to the Proposing Release, namely that the impact of excluding quickly cancelled orders on fill rates might be limited.

[1778] As discussed in *supra* note 1199, the analysis may overestimate fill rates due to the exclusion of orders with multiple submission messages. In the alternative analysis without this exclusion described in *supra* note 1199, fill rates differ from those in Figure 25 by less than 1 percentage point. While this alternative analysis, by assigning to the total submitted volume the price at the time of submission, tended to overestimate the number of executable NMLOs, it is unclear that this would systematically overestimate fill rates for executable NMLOs as discussed in *supra* note 1442. Therefore, the Commission's conclusions from this analysis are not affected by the exclusion of orders with multiple submission messages.

[1779] This sample contains a mixture of stocks in terms of share price and market capitalization, and these numbers are likely to look different for individual stocks according to their market capitalization and liquidity characteristics.

The benefit of excluding quickly cancelled orders is also likely to be limited if excluding these orders systemically increases fill rates across all reporting entities and does not necessarily lead to a change in ranking between reporting entities. To explore this possibility, the Commission limited the sample to the five largest market centers in terms of execution volume, to examine how the rankings between these market centers changes in terms of their fill rates for executable NMLOs resulting from changes to the threshold below which to exclude cancelled orders. Then it examined changes to their fill rate rankings for executable NMLOs as the threshold below which to exclude cancelled orders increased. The Commission found that market centers' rankings did not change until cancellations below one second were excluded, when the market centers ranked first and third switched places. As for reasons described above one second represents a maximum bound on a reasonable threshold for excluding cancellations, this again implies that the benefits of excluding quickly cancelled orders on fill rates might be limited.

(c) Include NMLOs Submitted Outside of Regular Trading Hours as a Separate Order Category

These amendments to Rule 605 will require NMLOs submitted outside of regular trading hours to be included in Rule 605 reports if they become executable during regular trading hours. The Commission considered whether it would be useful to include these orders as a separate order type category in Rule 605 reports. If NMLO orders submitted outside of regular trading hours have characteristics that are fundamentally different from other types of orders and have sufficient volume, their inclusion along with other orders could skew execution quality statistics. Pre-open orders likely have characteristics that differ from orders submitted during regular hours.[1780] However, these pre-open orders make up only a very small percentage of order volume.[1781] Therefore, it is unlikely that the inclusion of these orders along with other order types would significantly skew execution quality statistics, and including them as a separate order type category would likely only increase the complexity and size of Rule 605 report files. The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1782]

3. Reasonable Alternative Modifications to Required Information

(a) Reasonable Alternative Order Size Categories

(1) Defining Order Sizes Based on Number of Round Lots Rather Than Notional Categories

Instead of redefining order size categories according to notional values, the Commission considered an alternative that defined categories based on the number of round lots.[1783] This approach has several advantages. First, similar to defining categories based on notional values as in these amendments, categories based on number of round lots might make it easier to compare execution quality metrics across market centers that trade in differently priced stocks. Pre-controlling for the stock price would thus eliminate the need for users of Rule 605 to go through the extra step of collecting and controlling for stock price information before being able to meaningfully compare market centers using Rule 605 data. However, according to the MDI Rules, round lots are based on the previous month's trading price.[1784] Furthermore, as stated by several commenters, the MDI round lot categories are wide and therefore contain a wide range of stocks in terms of price, and as such, order size categories based on round lot denominations might not meet the objective of grouping orders with similar notional values.[1785] Therefore, unlike categories based on round lots, categories based on notional values include a more granular categorization of order sizes, and also incorporate information about changing stock prices in real time, thereby better grouping together similarly sized orders.

(2) Require Separate Information for Orders Larger Than One Share With a Fractional Component

The Commission considered an alternative in which, in addition to odd-lots, round lots, and fractional orders less than one share, reporting entities would also be required to report separate execution quality information for round lots with a fractional component, and odd-lots with a fractional component. This was suggested by a commenter, who stated that ''when a round lot or odd-lot order has a fractional share component, this could, in some cases, impact the time to execution and the execution price.'' [1786] The Commission agrees that, similarly to fractional orders less than a share, handling practices regarding orders greater than one share with fractional components may vary across broker-dealers and market centers [1787] and, to the extent that this is the case, this might have an impact on execution quality. However, an analysis of CAT data from 2023 for 400 stocks [1788] shows that odd-lots with fractional components and round lots with fractional components only make up a small percentage of order flow (0.003% and 0.0008%, respectively). Furthermore, in contrast to fractional orders less than a share, the Commission did not find execution quality to systematically vary significantly between odd-lots and rounds lots with fractional components and their counterparts without fractional components. Specifically, Figure 26 shows the share-weighted average time-to-execution of fractional orders less than a share, and orders greater than a share both with and without fractional components. In order to focus on order flow that is most likely to contain fractional components, this analysis focuses on orders originating from individual customer accounts at broker-dealers. The results show that, while fractional orders less than a share have much longer execution times, the execution times of odd-lot and round lot orders with fractional components do not appear to be systematically longer than those without fractional components. Therefore, the Commission does not believe that there would be a significant benefit to including separate execution quality information for these types of orders.

[1780] *See supra* section IX.C.3.b)(4) for an analysis showing that orders submitted pre-open are more likely to be more individual customer accounts as compared to orders submitted during regular opening hours.

[1781] *See supra* section IX.C.3.b)(4) for an analysis.

[1782] *See* Proposing Release, 88 FR 3786 at 3891 (Jan. 20, 2023).

[1783] One commenter supported this alternative. *See* Better Markets Letter at 6.

[1784] *See supra* note 1015 and accompanying text. A commenter stated that one issue with defining order size categories in terms of round lots would be that the definitions would not be based on real-time data. *See* Rule 605 Citadel Letter at 6.

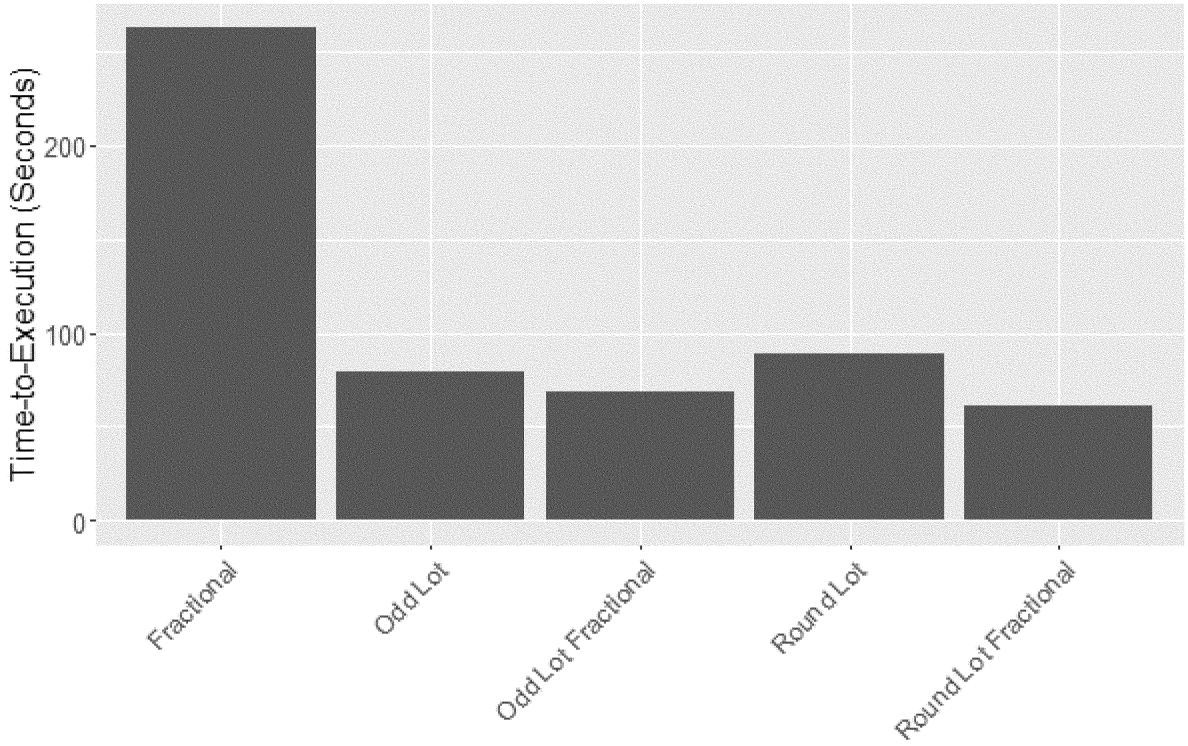
[1785] *See, e.g.,* FIF Letter at 14; SIFMA Letter at 32; Rule 605 Citadel Letter at 6; Schwab Letter at 33.

[1786] *See* FIF Letter at 15.

[1787] *See supra* section IX.C.3.b)(1)(b) for further discussion for differences in handling practices for fractional shares.

[1788] *See supra* note 1211 for dataset description.

Figure 26: Time-to-Execution of Fractional Orders, Q1 2023



This figure plots the share-weighted average time-to-execution of fractional orders less than a share, odd-lots, odd-lots with a fractional component, round lots, and round lots with a fractional component. Execution times are calculated as the time of order receipt (which, for at- and inside-the-quote NMLOs, is equivalent to the time of executability) to the first time that one or more of the order's shares are executed. Share weights are calculated as the number of executed shares in an order divided by the total number of executed shares summed across stocks and all days in the sample. This analysis uses CAT data for a sample of 400 stocks. See supra note 1211 for data description.

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(b) Reasonable Alternative Time-to-Execution Statistics

(1) Replace Time-to-Execution Buckets With Time-to-Execution Statistics

In the Proposing Release, the Commission proposed eliminating time-to-execution buckets and instead requiring reporting entities to report additional time-to-execution statistics,[1789] specifically, the median and 99th percentile of time-to-execution statistics.[1790]

The Commission continues to believe that requiring time-to-execution statistics as proposed would provide market participants with useful information about the distribution of time-to-execution for a given stock, order size, and order type combination (*i.e.,* a given ''row'' in a Rule 605 report). However, the Commission acknowledges that, as stated by a commenter, one issue with point estimates of distribution information, such as the median and 99th percentile, is that they would not allow for an aggregation across rows.[1791] The commenter instead suggested including two measures of the share-weighted average time-to-execution—one adjusted for outliers, and one not adjusted for outliers.[1792]

The Commission understands that consumers of Rule 605 reports benefit from the ability to aggregate information across various order types and sizes (*i.e.,* rows) of Rule 605 reports [1793] and therefore agrees that the inability to aggregate across median and 99th percentile time-to-execution measures represents a disadvantage to including these measures. However, requiring time-to-execution buckets will allow market participants to recreate average time-to-execution [1794] in a way that is

[1789] *See* Proposing Release, 88 FR 3786 at 3812–3813 (Jan. 20, 2023); *see also supra* section III.B.3.a).

[1790] *See* proposed Rule 605(a)(1)(ii)(D), (E), (H), (I), (M), and (N); proposed Rule 605(a)(1)(iii)(D) and (E). Several commenters supported the inclusion of time-to-execution statistics rather than time-to-execution buckets. *See, e.g.,* Robinhood Letter at 46; Nasdaq Letter at 45.

[1791] *See* FIF Letter at 21, stating that ''market participants and other firms analyzing Rule 605 data cannot aggregate [median and 99th percentile] across different symbols and order type categories.''

[1792] *See* FIF Letter at 22.

[1793] *See, e.g., id.*

[1794] *See, e.g.,* Healthy Markets Letter at 17, stating that ''[b]y creating buckets for timestamp, rather than average time to execution, the reports would provide much greater granularity while still allowing a user of the data to recreate average time to execution.''

more straightforward than the method suggested by the commenter.[1795]

(2) Calculate Time-to-Execution Based on Time of Order Route

The Commission also considered an alternative in which, rather than calculating order execution times from the time of order receipt, broker-dealers would calculate the execution time from the time of order route, *i.e.,* a time after the broker-dealer has performed internal risk controls and decided to accept the order. This alternative was suggested by several commenters, who stated that current order management systems may not generate a timestamp for when risk controls have been applied and it would be costly to generate such markers,[1796] and that using order receipt time could create a perverse incentive for firms to diminish time spent on necessary reviews in an effort to improve execution speed statistics.[1797] The Commission disagrees that the use of order receipt time will incentivize broker-dealers to circumvent their risk controls. Broker-dealers are subject to other regulatory requirements, including the Commission's market access rule, that will continue to apply.[1798] Furthermore, broker-dealers likely have other incentives to perform these risk controls, such as reputational and business concerns. Furthermore, to the extent that the requirement to use order receipt time requires broker-dealers to update their management systems to generate such a timestamp, such costs are included in the cost estimates for first-time Rule 605 reporters as described in section IX.D.2.a)(1). On the other hand, there are greater benefits associated with using time of order receipt rather than time of order route. This timestamp method is more relevant to customers because it will show how the broker-dealer handled the order from the time the broker-dealer received it.[1799]

(c) Reasonable Alternative Spread Measures

(1) Use Different Clock Time Horizons To Calculate Realized Spread

The adopted amendments to Rule 605 will require the realized spread to be calculated at a range of time horizons between 50 milliseconds and 5 minutes. This represents an expansion to what was proposed, that the realized spread be calculated at two time horizons (15 seconds and one minute).[1800] The Commission also considered alternative approaches, such as including a smaller set of time horizons.[1801]

In the Proposing Release, the Commission acknowledged that ''requiring an additional specification of realized spreads would entail adding another data item, which would also increase the complexity of Rule 605 reports.'' [1802] However, upon further review, the Commission agrees with a commenter that the detailed Rule 605 reports are ''intended to be machine-readable, not human-readable,'' and that ''[a]dding rows and columns to the Rule 605 report, within reason, would not materially increase the costs of processing these reports and storing the relevant data.'' [1803] Furthermore, a lower number of time horizons would reduce the benefits from including a wide range of realized spread time horizons, as discussion in section IX.D.1.b)(2)(c)(i).

One commenter suggested replacing the five-minute time horizon with ''short timeframes to include 50ms, 100ms.'' [1804] Some of the results from the Commission's analysis of realized spreads in section IX.D.1.b)(2)(c)(i) support the inclusion of very short time horizons, particularly for the largest stocks, and as discussed above the Commission is including a 50-millisecond time horizon.[1805] However, other analyses show that including longer time horizons will be beneficial for smaller stocks.[1806] Therefore, as discussed above, it will be beneficial to include a wide range of time horizons between 50 milliseconds and 5 minutes.

(2) Use Trade Time Horizons To Calculate Realized Spread

The Commission also considered whether the time horizon used to calculate realized spreads should be measured in terms of ''trade time,'' rather than ''clock time.'' The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1807] An ideal measurement horizon for realized spreads would be one that aligns with the amount of time an average liquidity provider holds onto the inventory positions established from providing liquidity. This horizon varies according to characteristics that impact liquidity providers' ability to turn over their positions, including stock liquidity; [1808] however, this time horizon also varies over time, as overall market conditions change. The use of a fixed time horizon could therefore make it so that the ability of realized spread measures to capture information about adverse selection varies over time.

Instead of setting a fixed ''clock time'' horizon, volume or ''trade time'' measures changes between the ''the initial trade to the *i*th trade thereafter,'' [1809] and therefore allows for a time horizon that is flexible to different levels across stocks, and also over different time periods. In other words, while prices may update under liquid conditions in a few seconds or less, during very illiquid conditions several minutes may go by without a trade. Measuring time in terms of number of trades allows for the horizon to match these different speed ''regimes'' and might result in realized spread calculations that are more consistently relevant.[1810]

However, the Commission is mindful of the additional computational resources that would be required if trade time were required to calculate realized spreads, as this would require reporting entities to match their execution information both to information on the NBBO, as would be necessary under the proposed clock time horizons, but additionally historical trade information from the exclusive SIPs.[1811] More computationally intensive metrics

[1795] Furthermore, the commenter's suggested alternative of a time-to-execution average adjusted for outliers would result in the same issue as with median and 99th percentile—*i.e.,* it would not be possible to aggregate these measures across rows as the identified outliers in the aggregated group could be different from those identified within each individual pre-aggregate group.

[1796] *See* FIF Letter at 19.

[1797] *See* Schwab Letter II at 33; Schwab Letter III at 5; FIF Letter II at 9.

[1798] *See supra* note 185 and corresponding text.

[1799] *See supra* section II.A.2.c) for further discussion. One commenter supported the use of receipt time rather than route time for broker-dealers; *see* Healthy Markets Letter at 16.

[1800] *See* Proposing Release, 88 FR 3786 at 3814–3816 (Jan. 20, 2023); *see also supra* section III.B.4.a)(1).

[1801] Specifically, in the Proposing Release, the Commission proposed including two realized spread time horizons, 15 seconds and one minute. *See* Proposing Release, 88 FR 3786 at 3815 (Jan. 20, 2023).

[1802] *See* Proposing Release, 88 FR 3786 at 3892 (Jan. 20, 2023).

[1803] *See* FIF Letter at 16.

[1804] *See* Healthy Markets Letter at 17.

[1805] *See, e.g.,* the results in Figure 19 and surrounding discussion.

[1806] *See, e.g.,* the results in Figure 18 and Table 6 and surrounding discussion.

[1807] *See* Proposing Release, 88 FR 3786 at 3892 (Jan. 20, 2023).

[1808] *See supra* note 1239 and the results in Figure 14 and surrounding discussion.

[1809] *See* Conrad and Wahal, *supra* note 544, at 241.

[1810] For this reason, some academic studies use trade time instead of clock time when calculating metrics; *see, e.g.,* David Easley, Marcos M. Lopez De Prado & Maureen O'Hara, *Flow Toxicity and Liquidity in a High-Frequency World,* 25 Rev. Fin. Stud. 1457 (2012).

[1811] *See supra* note 1009.

would likely increase reporting entities' compliance costs. Therefore, the adopted amendment to include multiple fixed time horizons will allow for sufficient flexibility in capturing realized spread information for stocks and/or time periods with different liquidity characteristics without increasing the computational resources required to calculate this measure.

(3) Use Weighted Midpoint To Calculate Effective and Realized Spread

Under the adopted amendments, Rule 600(b)(8) defines effective spreads as, for buy orders, double the amount of difference between the execution price and the midpoint of the national best bid and national best offer at the time of order receipt and, for sell orders, as double the amount of difference between the midpoint of the national best bid and national best offer at the time of order receipt and the execution price. For midpoint-or-better limit orders, the time of executability is used rather than the time of order receipt.[1812] The Commission is further adopting a definition of the average percentage effective spread, which will be equal to the average effective spread for order executions, divided by the midpoint for order executions.[1813] However, an academic study [1814] found that measuring the effective spread relative to the midpoint overestimates effective spreads by an average of 13%-18%, and that the bias can vary across stocks, trading venues, and investor groups. The paper instead suggests measuring effective spreads relative to a weighted midpoint, which factors in the depth available at the best bid and ask price, in order to reduce this bias.[1815]

The presence of bias in effective spreads in Rule 605 reports would impact market participants' ability to use this metric to make comparisons across reporting entities, particularly if the bias leads to a systematic over- or under-estimation of spreads for a particular entity or group of entities. However, there are benefits and costs to the use of the midpoint compared to the weighted midpoint for calculating effective spreads. On the one hand, the midpoint requires only data on the best available bid and ask price. Calculating the weighted midpoint on the other hand would require that reporting entities additionally collect data on the depth available at the NBBO.[1816] Furthermore, the midpoint may be easier to compute and interpret, as it is more familiar to market participants than the weighted midpoint. The Commission did not receive comment on this alternative, which was also in the Proposing Release.[1817]

(d) Reasonable Alternative Size Improvement Measures

(1) Dollar Size Improvement Calculated Using Proprietary Full Depth-of-Book Data

The Commission considered alternative measures of size improvement, including requiring a measure of dollar size improvement that would capture the dollar savings that an investor receives from size improvement offered by a reporting entity, taking into account the depth of book quotes and odd-lot quotes available from all exchanges' proprietary depth-of-book data feeds. The measures of dollar size improvement considered include both RPI and a modified RPI measure that would account for the fact that order sizes may exceed the consolidated depth available across all order levels.

First, as suggested by a petitioner, the Commission considered requiring the reporting of RPI, which would be calculated as the signed difference between the value-weighted average price (''VWAP'') of the transaction, and a reference price calculated as the VWAP that the trader would have gotten from walking a consolidated limit order book consisting of displayed liquidity from all national securities exchanges, taking into account both odd-lots and depth available at prices outside of the NBBO.[1818] In other words, it calculates how much money a trader saved by the market center executing their trade at a particular price, rather than having their order walk the consolidated limit order book.[1819] Because prices worsen deeper in the book, this measure could contain more information than combining price improvement with the size improvement metrics described in section IX.D.1.b)(2)(c)(v). Further, because the execution price is measured relative to depth of book as opposed to midpoint, this measure could contain information beyond effective spread.

In addition to RPI, the Commission also considered a modified RPI measure that would account for the fact that order sizes may exceed the consolidated depth available across all order levels.[1820] This alternative would account for this possibility by truncating the calculation of dollar size improvement at the consolidated depth of book size, and separately requiring the reporting of the number of shares executed in excess of consolidated depth of book size. Specifically, this alternative would consist of the following three data elements: (1) The share-weighted average of, for each order, the signed difference between the value-weighted average price (''VWAP'') that the trader would have gotten from walking a consolidated limit order book consisting of the depth available from consolidated proprietary depth-of-book data, and the midpoint (''reference spread''); (2) The share-weighted average of, for each order, the signed difference between the VWAP that the trader actually received on their order and the midpoint. If the number of executed shares exceeded the depth available from consolidated proprietary depth-of-book data, the VWAP should only be calculated for those executed shares that are not in excess of this sum (''truncated effective spread''); (3) The sum of, for each order, the number of shares executed in excess of the depth available from consolidated proprietary depth-of-book data (''shares executed in excess of consolidated depth-of-book''). With this information, market participants would be able to compare the truncated effective spread to the reference spread to determine the dollar size improvement that they received for their order (capped at the consolidated depth-of-book size). Market participants would also be able to use the shares

[1812] *See* final 17 CFR 242.600(b)(8).

[1813] *See* final 17 CFR 242.600(b)(10).

[1814] *See* Bias in the Effective Bid-Ask Spread, *supra* note 1244.

[1815] The weighted midpoint is calculated using the following formula: weighted midpoint = ((bid price × quantity at the ask price) + (ask price × quantity at the bid price))/(quantity at the ask price + quantity at the bid price). *See id.*

[1816] This may not be a significant cost, as reporting entities are required to collect information on NBBO depth for computing the size improvement measures under the adopted amendments. *See supra* section III.B.4.e)(2).

[1817] *See* Proposing Release, 88 FR 3786 at 3893 (Jan. 20, 2023).

[1818] *See supra* section III.B.4.e)(2) for further discussion of the RPI measure.

[1819] There can be variation in the information contained in different national securities exchanges' proprietary depth-of-book data feeds. For example, some exchange depth-of-book products may offer information on order messages while others may offer aggregate information on the shares available at different price levels. Additionally, it is also possible that some national securities exchanges may not offer depth-of-book data feeds. It may be difficult to compare RPI across reporting entities if different entities used different depth-of-book feeds containing different information to compute the metric.

[1820] To see why this matters for a measure of dollar size improvement, consider an example where a wholesaler internalizes a sell order for 10,000 shares at the NBB, while there are only 6,000 shares available across all bid prices in the consolidated book. The hypothetical price that the trader would have gotten for the 4,000 shares in excess of the consolidated book depth is not defined, and thus it is unclear how the RPI reference price (*i.e.,* the VWAP that the trader would have gotten from walking a consolidated limit order book consisting of displayed liquidity from all national securities exchanges) should be calculated.

executed in excess of consolidated depth-of-book for two purposes. First, market participants would be able to get a sense of the number of executed shares that are not included in the truncated effective spread and reference benchmark measures, which would help contextualize the informativeness of these measures. Second, in combination with information about total executed shares and share-weighted average effective spread in Rule 605 reports, market participants could use this measure to back out the per share effective spread paid for shares executed in excess of consolidated depth-of-book.[1821]

Dollar size improvement metrics differ from the size improvement metrics in the adopted amendments in several ways. First, in the adopted amendments, both the order size benchmark and the size improved outsized shares [1822] are reported in terms of numbers of shares, and as such do not ascribe a dollar value to the size improvement received by traders. Therefore, while market participants can use these metrics to calculate the rate of size improvement offered by a reporting entity (*e.g.,* by calculating the outsized size improvement rate [1823]), they do not allow market participants to associate this rate with a particular cost savings.[1824] Second, while the size improvement metrics included in the adopted amendments consider only displayed depth available at the NBBO, the alternative dollar size improvement metrics would incorporate information about the consolidated depth and prices available across all order book levels.

Requiring the reporting of dollar size improvement in Rule 605 reports could result in additional benefits for market participants relative to the adopted amendments. Because it incorporates information across all order book levels, a measure of dollar size improvement (such as RPI) may be more informative than measures calculated only using information about depth at the best displayed prices. In order to compare the extent to which RPI and the adopted size improvement metrics contain similar information about size improvement, the Commission used data from the Tick Size Pilot B.II Market and Marketable Limit Order dataset [1825] to calculate the average correlation [1826] between these measures. Similar to the analysis in Table 8 examining whether price improvement and size improvement measures contain different information, the Commission also calculated the average correlation between RPI, price improvement and effective spreads to confirm that RPI contains different information than the metrics that are already included in Rule 605 reporting requirements. As in Table 8, the analysis is performed separately for national securities exchanges and off-exchange market centers.

Results are presented in Table 15 and show that RPI and price improvement have a correlation of around 0.4 for both national securities exchanges and off-exchange market centers, implying that these measures contain some (but not all) of the same information about execution quality.[1827] Similarly, there is moderate negative correlation between RPI and effective spreads, implying that these measures are also somewhat overlapping in terms of their information about execution quality for both types of market centers. The analysis shows a low level of correlation between RPI and the outsized size improvement rate for exchanges (6.4%) and for off-exchange market centers (14.1%). This implies that the adopted size improvement measure may be missing some information about size improvement that would be contained in a measure of dollar size improvement, such as RPI.

[1821] To see this, consider that the average effective spread (*EffSpr*) can be calculated as the weighted average between the truncated effective spread ($EffSpr_{trunc}$) and the effective spread paid for shares in excess of consolidated depth-of-book ($EffSpr_{excess}$). By defining by s_{total} the total number of executed shares, s_{excess} the shares executed in excess of consolidated depth-of-book, one can calculate the number of shares available from the consolidated depth-of-book at $s_{trunc} = s_{total} - s_{excess}$. The effective spread paid for shares in excess of consolidated depth-of-book $EffSpr_{excess}$ could then be derived from the following relationship: $EffSpr = (s_{trunc}/s_{total}) * EffSpr_{trunc} + (s_{excess}/s_{total}) * EffSpr_{excess}$.

[1822] *See supra* section III.B.4.(e)(2) for more information about these metrics.

[1823] *See supra* note 1547 and corresponding text for information about how the outsized size improvement rate is calculated.

[1824] Rule 605 as amended will allow for market participants to calculate some information about their cost savings. First, the measures of price improvement in final Rule 605(a)(1)(ii)(F) and (O) will allow market participants to calculate their savings relative to, respectively, the NBBO and best displayed price. However, this measure will be incomplete for orders that execute with size improvement. Second, the average effective spread in final Rule 605(a)(1)(ii)(B) will allow market participants to calculate their savings relative to the midpoint. However, this measure does not take into consideration the prices or depth available at different order books levels.

[1825] *See supra* note 1545 for dataset description. This analysis uses data from prior to the implementation of the MDI Rules and the specific numbers may be different following the implementation of the MDI Rules. However, it is unclear whether or how these effects will impact the correlations between these measures documented in this analysis. *See supra* section IX.C.1.c)(2).

[1826] *See supra* note 1546 for a description of how average correlations are calculated.

[1827] This analysis has been updated from the Proposing Release for the reasons described in *supra* note 1548. *See* Proposing Release, 88 FR 3786 (tbl. 15) (Jan. 20, 2023). The Proposing Release found higher correlation between RPI and the proposed measure of size improvement (18.4% for exchanges and 22.7% for off-exchange market centers). Therefore, relative to the Proposing Release, the analysis in Table 15 is more indicative of the adopted size improvement measure missing some information about size improvement that would be contained in a measure of dollar size improvement, such as RPI.

Table 15: Average Correlation between Measures of Price and Size Improvement

Variables	National Securities Exchanges	Off-Exchange Market Centers
RPI and Price Improvement	0.421	0.372
RPI and Effective Spreads	-0.113	-0.138
RPI and Outsized Size Improvement Rate	0.064	0.141

This table presents correlations between three measures of price improvement and size improvement: price improvement, calculated as the signed difference between the execution price and the NBBO, the effective spread, calculated as twice the signed difference between the execution price and the NBBO midpoint, and the outsized size improvement rate. This analysis uses data from the Tick Size Pilot B.II Market and Marketable Limit Order dataset. See supra note 1545 for dataset description and supra note 1546 for methodology. To construct a measure of average correlation, the Pearson correlation coefficient is first calculated for each pair of execution quality metrics, for each market center-stock combination. Then value-weighted average correlation coefficient across all stocks for each market center is constructed, using dollar volume as weights. The resulting correlation coefficients are then averaged across market centers using an equal-weighted average. This analysis uses data from prior to the implementation of the MDI Rules and specific numbers may be different following the implementation of the MDI Rules. See supra note 1825 and section IX.C.1.c)(2).

Reporting RPI or the modified version of RPI would require depth-of-book information. In the Proposing Release, the Commission stated that it was not clear that the cost of requiring reporting entities to have access to the full set of consolidated depth information would justify the benefits of RPI. One commenter disagreed with this conclusion and stated that ''[t]he SEC does not however quantify these costs or benefits.'' [1828] However, the Commission observed in the Proposing Release that one market center estimated its costs related to subscribing to depth of book data feeds for 11 national securities exchanges to be between $51,480 and $226,320 per exchange per year.[1829] The Commission otherwise qualitatively analyzed the costs and benefits of this alternative.[1830] Another commenter stated that ''many brokers utilize vendors to produce Rule 605 reports and these vendors are capable of handling depth-of-book data.'' [1831] The Commission acknowledges these to be potential cost reductions to reporting RPI to the extent that multiple market centers use vendors that subscribe to depth-of-book data and vendors pass along the resultant cost savings to market participants. It is also the case that the data may be available at lower cost if not purchased in real time, though the cost may still be substantial.[1832]

To mitigate the costs of calculating dollar size improvement using full depth-of-book data, the Commission considered a second alternative that would add a field (or fields) to Rule 605 reports for a dollar size improvement measure (or measures), but allow reporting entities that subscribe to the full set of proprietary data feeds to voluntarily report this measure.[1833] This approach would standardize the disclosure for those entities that choose to report. And only those reporting entities that decide to voluntarily report would incur additional costs, which may be minimal to the extent they already subscribe to proprietary depth-of book products. However, reporting entities could voluntarily provide this same information on their websites, alongside their Rule 605 reports, without the Commission amending the Rule 605 reports to add this field, and the information benefits of reporting this information as part of the Rule 605 reports versus reporting the information separately, in the same format but a different file, is not clear. The Commission acknowledges, however, that there may be a benefit to investors and to market participants, wishing to signal execution quality, to have these statistics as part of their Rule 605 reports. The Commission may evaluate the issues raised after the implementation of the MDI Rules.

(2) Dollar Size Improvement Calculated Using MDI Depth-of-Book Data

The Commission also considered an alternative that would require all Rule 605 reporting entities to report information that is similar to the petitioner's measure of RPI described above but adapted to require this information only to be reported relative to the odd-lot, aggregate quotation size, and depth-of-book information that will be available from competing consolidators following the implementation of the MDI Rules.[1834] Since consolidated market data under MDI includes only five levels of depth-of-book data,[1835] under this alternative, the required size improvement information would be truncated at the

[1828] *See* CCMR Letter at 16.

[1829] *See* Proposing Release, 88 FR 3786 at 3818, n.414 (Jan. 20, 2023).

[1830] *See id.*

[1831] Virtu Letter II at 12–13. The commenter also states that more market centers would need to purchase depth of book data should the Commission adopt the Minimum Pricing Proposal; *see* Minimum Pricing Increments Proposing Release, 87 FR 80266 (Dec. 29, 2022). This Proposal has not been adopted and thus is not considered as either part of the baseline or a cost mitigant here. *See supra* note 981.

[1832] *See, e.g., Price List—U.S. Equities, the Nasdaq Stock Market,* NASDAQ, *available at https://www.nasdaqtrader.com/Trader.aspx?id=DPUSdata#tv* (last visited Feb. 2, 2024, 2:11 p.m.); and *Historical Proprietary Market Data Pricing,* NYSE (Jan. 2024), *available at https://www.nyse.com/publicdocs/nyse/data/NYSE_Historical_Market_Data_Pricing.pdf.*

[1833] This alternative was also discussed in the Proposing Release. *See* Proposing Release, 88 FR 3786 at 3893 (Jan. 20, 2023).

[1834] *See supra* section IX.C.1.c)(2). One commenter stated that a size improvement measure should not be included within Rule 605 until such a time when the public data feed contains more information regarding the depth of quotations. *See* Healthy Markets Letter at 18.

[1835] *See* MDI Adopting Release, 86 FR 18596 at 18625 (Apr. 9, 2021). MDI requires all national securities exchanges to make market data feeds containing their odd-lot information and depth-of-book data available to competing consolidators and self-aggregators, which would ensure that all exchanges provide the information needed to calculate this measure.

sum of displayed liquidity available of shares available from odd-lot information,[1836] aggregate quotation size,[1837] and depth-of-book data.[1838] Similarly to the measure described in section IX.E.3(d)(1), this would also have the effect of excluding from the measure shares that are executed in excess of consolidated depth of book size, for which RPI is not defined.

Specifically, this alternative would consist of the following three data elements: (1) The share-weighted average of, for each order, the signed difference between the value-weighted average price (''VWAP'') that the trader would have gotten from walking a consolidated limit order book consisting of the depth available from odd-lot information, aggregate quotation size, and depth-of-book data (''reference spread''); (2) The share-weighted average of, for each order, the signed difference between the VWAP that the trader actually received on their order and the midpoint. If the number of executed shares exceeds the depth available from odd-lot information, aggregate quotation size, and depth-of-book data, the VWAP should only be calculated for those executed shares that are not in excess of this sum (''truncated effective spread''); (3) The sum of, for each order, the number of shares executed in excess of the depth available from odd-lot information, aggregate quotation size, and depth-of-book data (''shares executed in excess of consolidated depth-of-book'').

Requiring the reporting of dollar size improvement calculated using data available from competing consolidators could result in some additional costs, as reporting entities (following the implementation of MDI rules) would be required to obtain depth-of-book data from competing consolidators in order to calculate these measures.[1839] To the extent that these reporting entities would have purchased a less expensive data product that does not include depth-of-book information absent this requirement, this would result in additional costs for market participants. However, this alternative could result in additional benefits for market participants relative to the adopted amendments. Because it would incorporate information across multiple order book levels, it may be more informative than measures calculated using information only about depth at the best displayed prices. As such, it would have some of the same benefits as the alternative in section IX.E.3(d)(1), though it would not have all of these benefits as the measure would only incorporate information from a subset of order book levels. It would be likely to come at lower cost compared to the alternative above.[1840] Though the Commission is not adopting this alternative, the Commission will continue to evaluate the issues raised to determine if any further action is appropriate following the implementation of MDI.

(3) Other Measures of Size Improvement

As an alternative to the adopted size improvement metrics, one commenter suggested including three metrics related to size improvement: ''(1) the number of orders for which the order size exceeded the available shares displayed on the relevant side of the NBBO ('outsized orders'); (2) the total number of shares executed as part of these outsized orders; and (3) the number (or percentage) of shares within the outsized orders that received size improvement (*i.e.,* were executed at or better than the NBBO price, in excess of the amount of aggregate displayed liquidity at the NBBO).'' [1841] The commenter stated that, compared to the proposed size improvement metrics, ''[t]hese metrics would be more informative as they are not affected by orders in which there was not a need to provide size improvement.'' [1842]

The Commission agrees with the commenter that ''the number (or percentage) of shares within the outsized orders that received size improvement (*i.e.,* were executed at or better than the NBBO price, in excess of the amount of aggregate displayed liquidity at the NBBO)'' would be useful for market participants, and is adopting the ''size improvement outsized shares,'' which is substantively equivalent to the commenter's third suggested metric.[1843] However, the information provided by the other two metrics suggested by the commenter would not be as informative as similar information included in the amendments.

The suggested metric, ''the number of orders for which the order size exceeded the available shares displayed on the relevant side of the NBBO ('outsized orders'),'' is similar to the outsized share count in the adopted amendments but less informative because it is based on the number of orders.[1844] As most other metrics required by Rule 605 are recorded in terms of number of shares, rather than number of orders,[1845] market participants would not have been able to compare the suggested measure to the other measures in Rule 605 reports.

The suggested metric, ''the total number of shares executed as part of these outsized orders,'' is similar to the outsized share count in the adopted amendments, but less informative because it would not control for size improvement opportunities. While the commenter did not specify why this metric would be informative to market participants regarding size improvement, one possible use would be to assess the number of shares within outsized orders that execute with size improvement, as a percentage of total executed shares within outsized orders, as a way to calculate a size improvement ''rate.'' For example, if the metrics would reveal that 200 shares executed as part of outsized orders, and 100 shares of outsized orders received size improvement, a market participant could infer that 50% of shares executed as part of outsized orders were executed with size improvement. However, this rate metric would not be able to distinguish between different size improvement opportunities in cases of different levels of available depth, and thus would lead to an inaccurate comparison across market centers.

To see this, consider Market A, which fully executes a 500-share order at the NBBO while there were only 200 shares of available NBBO depth. The metrics suggested by the commenter would reveal the following information: (1) one outsized order, (2) 500 shares executed as part of outsized orders, and (3) 300 shares of outsized orders that received size improvement. Compare this to Market Center B, which fully executes a 500-share order at the NBBO while there were 400 shares of available NBBO

[1836] *See* final 17 CFR 242.600(b)(69)(ii).

[1837] *See* 17 CFR 242.600(b)(3).

[1838] *See* final 17 CFR 242.600(b)(31).

[1839] To the extent competing consolidators make it available, reporting entities could compute the metrics using historical depth-of-data, which could have a lower price than real-time depth of book.

[1840] Also, unlike the alternative in section IX.E.3(d)(1), this alternative would not require the Commission to identify which proprietary depth-of-book data products would be needed to calculate the measure, since the measure would be calculated based on depth-of-book data as defined in core data under the MDI rule.

[1841] *See* Virtu Letter at 10.

[1842] *See id.*

[1843] *See supra* section III.B.4.e)(2) for further discussion of the ''size improvement outsized shares.''

[1844] As discussed in section IX.D.1.b)(2)(c)(v), by comparing the adopted order size benchmark to the total number of submitted shares, market participants will be able calculate the number of shares that were submitted in excess of the available shares displayed on the relevant side of the NBBO (''outsized share count''). Outsized Share Count = Number of Submitted Shares − Order Size Benchmark. *See supra* note 1543.

[1845] For example, the metrics required by final Rule 605(a)(1)(i)(C) through (N); (a)(1)(ii)(E), (H), (J), (M), (O), (P), (R), and (S); (a)(1)(iii)(B) and (C) are required to be reported in terms of number of shares. In contrast, final Rule 605(a)(1)(i)(A) and (a)(1)(iii)(A) are the only statistics required to be reported in terms of number of orders.

depth. The metrics suggested by the commenter would reveal the following information: (1) one outsized order, (2) 500 shares executed as part of outsized orders, and (3) 100 shares of outsized orders that received size improvement. While Market Center B would reveal a ''worse'' rate of only 20% of executed outsized shares receiving size improvement (compared to Market Center A's 60%), this would not take into account that Market Center B had fewer ''opportunities'' to provide size improvement (in terms of the number of shares that were eligible to receive size improvement), due to the higher available depth. In other words, comparing the number of shares executed with size improvement to the number of executed shares in outsized orders would not result in a measure that takes into account the number of shares that were eligible to receive size improvement. Instead, a more informative assessment of size improvement is to compare (1) the number of shares within outsized orders that received size improvement to (2) the number of shares that were eligible to receive size improvement. The first metric is equivalent to the size improved outsized share count, which the Commission is adopting.[1846] The second metric is equivalent to the ''outsized share count,'' which can also be calculated from metrics included in the adopted amendments, *i.e.,* by subtracting the order size benchmark from the number of submitted shares.[1847]

In sum, because a size improvement rate calculated relative to ''the total number of shares executed as part of these outsized orders'' would not control for size improvement opportunity, and because a measure of submitted volume that exceed available depth expressed in terms of number of orders would not allow market participants to compare this measure to most other Rule 605 measures, the Commission does not believe that the metrics suggested by the commenter would be more informative than those included in these amendments. Furthermore, the Commission disagrees that the metrics suggested by the commenter ''would be more informative as they are not affected by orders in which there was not a need to provide size improvement.'' [1848] While it is true that the metrics suggested by the commenter ''are not affected by orders in which there was not a need to provide size improvement,'' as discussed in section IX.D.1.b)(2)(c)(v), the adopted size improvement metrics also allow market participants to net out the effect of shares for which there were no size improvement opportunities from an analysis of size improvement, *i.e.,* by subtracting the order size benchmark from the number of submitted shares to get the outsized share count.

4. Reasonable Alternative Modifications to Accessibility

(a) Require a System for the Centralized Posting of Rule 605 Reports

Instead of or in addition to having market centers and larger broker-dealers post Rule 605 reports on their websites, the Commission considered requiring market centers to submit Rule 605 reports to a centralized electronic system, which would have then made these reports available to market participants. Multiple commenters supported the centralized posting of Rule 605 reports, stating that such centralization would ''facilitate accessibility'' [1849] and ultimately ''increase transparency'' [1850] and ''promot[e] competition'' [1851] leading to ''improvements in execution quality.'' [1852] By contrast, one commenter opposed centralized filing of Rule 605 reports because the resulting ease of access would give too much information to ''free riders'' who would ''use market modeling for mischief.'' [1853] We do not agree that increasing accessibility to Rule 605 reports would be detrimental to markets. As discussed in further detail below, centralized posting of Rule 605 reports would likely have better enabled market participants to access, evaluate, and compare the reports of multiple (or even the complete set of) reporting entities. However, because implementing such centralization would have entailed costs and uncertainties as well as potential time delays in implementation, the Commission did not adopt this alternative.[1854]

Market participants may face search costs when collecting existing Rule 605 reports in order to compare execution quality across reporting entities, in particular when collecting Rule 605 reports for multiple entities and across longer time periods.[1855] Such search costs will increase under the adopted amendments, which expand the number of reporting entities from 228 to 343, including 85 broker-dealers that introduce or carry 100,000 or more customer accounts.[1856] Compared to the adopted amendments, which maintain the requirement for market centers to post Rule 605 reports on their individual websites, creating a centralized electronic system would have lowered these search costs by making it easier for market participants to locate, collect and aggregate data from multiple Rule 605 reports in order to compare reporting entities, because all reports would have been available at a single central location. Compared to the adopted amendments, this reduction in search costs and resulting increase in accessibility would have enabled investors to use Rule 605 reports to compare execution quality across larger broker-dealers more efficiently. This might have increased the extent to which broker-dealers would need to compete on the basis of execution quality.

Likewise, compared to the adopted amendments, a centralized electronic system would have better enabled broker-dealers to use Rule 605 reports to compare execution quality across market centers, and thus might have increased competition among market centers on the basis of execution quality in order to attract order flow.[1857] Also, unlike the individual website posting requirement under the amended rule, a centralized electronic system could

[1846] *See* final 17 CFR 242.605(a)(1)(ii)(S).

[1847] *See supra* note 1844.

[1848] *See* Virtu Letter at 10.

[1849] *See* Fidelity Letter at 8; *see also* Nasdaq Letter at 46; BlackRock Letter at 4; J.T. Letter; HMA Letter at 16.

[1850] *See* BlackRock Letter at 4; *see also* J.T. Letter.

[1851] *See* BlackRock Letter at 4; *see also* Nasdaq Letter at 46.

[1852] *See* Nasdaq Letter at 46.

[1853] *See* Data Boiler Letter I at 27–28; *see also supra* section IX.D.2.b)(5) for further discussion of the cost of free riding as a potential cost of the amendments to Rule 605.

[1854] *See supra* section V.B.2.a) for further discussion.

[1855] For example, in order to collect a complete or mostly complete set of Rule 605 reports to select the reporting entity offering the best execution quality in a given stock, a market participant will need to perform the following tasks, for each reporting entity: first, search the internet for the website(s) of the reporting entity; second, find the area of the reporting entity's website(s) that links to its Rule 605 report; and third, find the correct link and download the appropriate report (or multiple reports, if the information for multiple months is desired). The process of collecting Rule 605 reports may be simplified by the NMS Plan's requirement that each market center must designate a single Participant to act as the market center's Designated Participant, and by the use of third-party vendors. *See supra* section IX.C.3.d) for a discussion; *see also supra* section IX.D.1.d)(3) for a discussion of how these search costs may increase as a result of an increase in the number of Rule 605 reporting entities under the adopted amendments.

[1856] *See supra* section VIII.C for a discussion of the estimated number of reporting entities under the adopted amendments; *see also supra* section IX.D.1.d)(3) for a discussion of how the increase in reporting entities under the adopted amendments may increase search costs for some market participants.

[1857] Several commenters agreed that centralization would promote the benefits of Rule 605 for competition. *See, e.g.,* Blackrock Letter at 4; Nasdaq Letter at 46; J.T. Letter at 7.

have enabled programmatic checks for appropriate standardization, formatting, and completeness before posting, and thus could have reduced processing costs for users compared to the amendments.

While the Commission agrees with commenters that centralizing Rule 605 reports would have created these benefits, the Commission also recognizes that requiring such centralization would impose uncertainties and costs related to implementation. As discussed above, commenters did not have a consensus view on how to accomplish centralization.[1858] One commenter recommended having FINRA maintain a public database for Rule 605 reports,[1859] another recommended the Commission post all Rule 605 reports on a single page on the Commission's website,[1860] and another recommended working out the details of a central repository through the Rule 605 NMS Plan.[1861]

The entity or entities responsible for administering the Rule 605 centralized electronic system would have incurred costs to create and maintain a system (including any compliance, programmatic formatting, completeness, and/or consistency checks that the system would run on the reports before dissemination). Administering entities could have passed these costs on to reporting entities in the form of filing fees, and/or to consumers of Rule 605 reports in the form of access fees. If potential consumers of Rule 605 reports decided not to access the reports because of these access fees, this would have represented a cost in the form of reduced accessibility of Rule 605 reports.[1862] Furthermore, to the extent that the centralized electronic system would have included programmatic formatting, completeness, and/or consistency checks on Rule 605 reports before accepting them, reporting entities would also have incurred costs to resolve any issues detected by such checks.[1863]

The Commission specifically considered two options for how to implement the centralized electronic system: using the existing Rule 605 NMS Plan and the Commission's EDGAR system.

One commenter supported a requirement that procedures established pursuant to the NMS Plan provide for the creation and maintenance of a centralized electronic system to serve as a repository for Rule 605 reports.[1864] As discussed above, the creation of a centralized electronic system would generally have resulted in additional economic benefits as compared to the adopted amendments by further promoting transparency and competition, and by reducing market participants' search costs through the availability of all Rule 605 reports at a single location. However, as the NMS Plan would have been tasked with designing and implementing the centralized electronic system, the Commission would ex ante be uncertain as to the specific functionality, ease of access, and extent of user fees that such a centralized electronic system would have provided. Likewise, the accessibility and timeliness of centralized Rule 605 information would have depended on how the NMS Plan would develop the functionality for distributing or making the Rule 605 reports public. Thus, adopting this alternative would have introduced a level of uncertainty as to the access and use of Rule 605 reports.

The Commission also considered requiring reporting entities to disclose Rule 605 information directly to the Commission through the Commission's EDGAR system, with the Commission subsequently making the information publicly available on EDGAR.[1865] However, two commenters opposed this alternative, characterizing EDGAR technology as ''outdated'' and ''inadequate for the task.'' [1866] Unlike an NMS Plan requirement, an EDGAR requirement would not have involved any costs to NMS Plan participants of creating and maintaining an electronic system for Rule 605 reports, and, as EDGAR does not charge any reporting or access fees, would not have involved the cost to reporting entities of paying reporting fees or the cost to consumers of Rule 605 reports of paying access fees. However, an EDGAR alternative would have increased certain reporting entities' compliance costs relative to the adopted amendments, as any reporting entities that do not already submit documents to the Commission via EDGAR would have incurred a one-time burden of submitting a notarized Form ID application to obtain EDGAR access codes, a burden that does not apply under the adopted amendments.[1867] EDGAR functionality would also have allowed for programmatic checks for appropriate standardization, formatting, and completeness of Rule 605 reports before dissemination, and while such checks would have improved the quality of Rule 605 data and thus benefited users of Rule 605 data, they would also have imposed upon reporting entities the additional burden of resolving any detected issues and submitting a corrected report before dissemination.

Because the centralization of Rule 605 disclosures, whether through an NMS Plan, EDGAR, or some other means, would have introduced implementation costs and uncertainties as well as implementation time delays compared to the adopted amendments, the Commission did not adopt a requirement for centralized posting of Rule 605 reports.

(b) Modify Format Requirements for Rule 605 Reports

Rule 605 requires reports to be made available to the public in a uniform, readily accessible, and usable electronic format through procedures established by the NMS plan participants,[1868] and the governing NMS Plan specifies that Rule 605 reports must be provided in pipe-delimited ASCII, which is a machine-readable electronic format.[1869] This has not changed under the adopted amendments. The Commission considered an alternative that would have required the detailed Rule 605 reports to be provided using an expanded version of the existing XML schema for Rule 606 reports.[1870] This

[1858] *See supra* section V.B.2.a.

[1859] *See* Healthy Markets Letter at 16.

[1860] *See* Fidelity Letter at 8.

[1861] *See* Angel Letter at 3.

[1862] However, maintaining the current requirement for reporting entities to post a free version of the report on their websites would have mitigated this cost by requiring that Rule 605 reports would continue to be freely available.

[1863] Reporting entities would likely have been most efficiently situated to remedy any identified issues in their own reports before posting (as opposed to having system administrators or report users remedy such issues).

[1864] *See* Angel Letter at 3.

[1865] EDGAR functionality would allow consumers of Rule 605 to search for specific reports or all reports for a given month. However, consumers wishing to combine reports for analysis would need to pull each report separately.

[1866] *See* FIF Letter at 33; Healthy Markets Letter at 16.

[1867] *See* 17 CFR 232.10; Section 3 of the EDGAR Filer Manual (Volume I) version 41 (Dec. 2022). Any market centers, brokers, and dealers that already submit documents on EDGAR would not incur this burden. For example, some broker-dealers choose to file the annual audit reports required by Form X–17A–5 Part III on EDGAR rather than via paper, and would thus already have the required access and procedures in place to submit Rule 605 Reports to EDGAR. *See* section 8.2.19 of the EDGAR Filer Manual (Volume II) version 68 (Dec. 2023).

[1868] *See* prior 17 CFR 242.605(a)(2); final 17 CFR 242.605(a)(3).

[1869] *See* Rule 605 NMS Plan at 2 (''Section V . . . provides that market center files must be in standard, pipe-delimited ASCII format''); *see also supra* note 135 and accompanying text. Even in the absence of an effective NMS plan, reports must be prepared ''in a consistent, usable, and machine-readable electronic format.'' Prior 17 CFR 242.605(a)(2); final 17 CFR 242.605(a)(4).

[1870] *See* 17 CFR 242.606(b)(3), requiring reports to be made available ''using the most recent versions

Continued

alternative would have allowed the data on detailed Rule 605 reports to be used interchangeably with the data in Rule 606 reports, thus facilitating the usage of Rule 605 data together with Rule 606 data, in line with the Commission's original intent for the rules.[1871] In addition, the use of XML rather than pipe-delimited ASCII would have facilitated the use of more complex data error checks (such as checks on elements in nested structures).

On the other hand, this alternative would have required reporting entities to establish technical systems to format the reports using the expanded XML schema and render them using the PDF renderer, thus imposing additional compliance costs relative to the adopted amendments. Furthermore, because Rule 605 reports consist solely of a series of discrete numeric values, and do not contain elements in nested structures, the sophisticated validations that XML enables would not have provided significant benefits for Rule 605 reports. In addition, because the nature of the Rule 606 data (which include narrative discussions) differs from the nature of the Rule 605 data (which are limited to a discrete set of numerical statistics), and because the population of entities that report Rule 606 data (broker-dealers) does not coincide with the population of entities that will report Rule 605 data (market centers and larger broker-dealers), the benefits to be realized from interchangeable usage of Rule 605 and Rule 606 data would not have been significant.

In a change from the proposal, the adopted amendments require market centers to publish summary reports in CSV and PDF formats. One commenter recommended this approach, stating CSV (or another format that can be copied into a spreadsheet program) ''would allow investors to compare summary data across firms more readily.'' [1872] We could alternatively have adopted the proposed requirement for market centers to publish summary reports in XML and PDF formats. Compared to CSV, XML can accommodate a wider variety of content structures, such as a series of multiple differently laid out tables or tables accompanied by textual footnotes. XML also enables more sophisticated validations than CSV does, such as validations on multiple nested elements. However, summary reports do not contain multiple differently laid out tables, textual footnotes, or nested elements, so these capabilities of XML are not relevant to summary reports. Instead, the Commission agrees with the commenter that using CSV rather than XML for the summary reports will allow investors to analyze summary report data more readily, and that this increased usability is more relevant to summary report data than the broader technical coverage that XML provides. The amended rules therefore replace the proposed XML requirement for summary reports with a CSV requirement.

5. Other Reasonable Alternatives

(a) Releasing Aggregated CAT Data

As an alternative to the adopted amendments, the Commission considered using CAT data to have either the Commission or the CAT Plan Processor [1873] provide execution quality information to the public at monthly intervals—or more frequently. This alternative would effectively eliminate the need for Rule 605 reports.

This approach would have lower compliance costs for reporting entities than the adopted amendments, as it would not require reporting entities to prepare Rule 605 reports. Another benefit of this alternative with regard to the adopted amendments is that the data in this alternative could be more comprehensive in terms of the breadth of broker-dealers whose execution quality information could be aggregated and published, because the Commission could publish aggregated data on execution quality from all broker-dealers instead of just those that meet the customer account threshold. As a result, the data would be more comprehensive, resulting in even greater benefits from transparency.[1874]

Numerous commenters supported this alternative, stating that requiring CAT to produce Rule 605 reports would increase efficiency and reduce the burdens and costs associated with preparing Rule 605 reports,[1875] and would result in more consistent and standardized reporting.[1876]

However, there are several drawbacks to this alternative relative to the adopted amendments. First, it would take some time before CAT data could be used to produce execution quality reports. The Commission continues to believe that it would be a major undertaking for the Plan Processor to build out and adapt systems to collect, process, and publish this information. This might result in a delay in market participants' access to information about execution quality, which would delay the benefits of the adopted rule. Second, costs associated with the Plan Processor would also increase because of increased requirements for processing power for the aggregation of CAT data if such computations could not be performed with existing resources (without reducing other functionality). Any costs incurred by the Plan Processor would be passed along to Plan Participants and Industry Members, which could result in larger costs to some reporting entities.[1877] Lastly, another drawback to this alternative is that releasing CAT data to the public could increase security risks. CAT contains highly sensitive information and creating a process that would release portions of the data, even if aggregated, could present risks.

(b) Expand Rule 606 Reporting Requirements

The Commission also considered an alternative suggested by a commenter in which, rather than requiring larger broker-dealers to prepare Rule 605 reports, broker-dealers would be required to submit expanded Rule 606 reports [1878] with additional information about the execution quality of their orders.[1879] While this might result in some lower compliance costs as a result of broker-dealers' existing experience with preparing and filing Rule 606 reports, many of the costs associated

of the XML schema and the associated PDF renderer as published on the Commission's website.'' *See also Order Routing and Handling Data Technical Specification,* SEC (Feb. 25, 2022), *available at https://www.sec.gov/files/order_handling_data_technical_specification-2022-02-25.pdf.*

[1871] *See* Rule 11Ac1–5 Adopting Release, 65 FR 75414 at 75414 (Dec. 1, 2000).

[1872] *See* FIF Letter at 6.

[1873] As set forth in the CAT NMS Plan, the Plan Processor is required to develop and, with the prior approval of the Operating Committee, implement policies, procedures, and control structures related to the CAT System that are consistent with 17 CFR 242.613(e)(4), and Appendix C and Appendix D of the CAT NMS Plan. *See* Joint Industry Plan; Order Approving the National Market System Plan Governing the Consolidated Audit Trail, SEC (Nov. 15, 2016), n.136, *available at https://www.sec.gov/rules/sro/nms/2016/34-79318.pdf.*

[1874] *See supra* section IX.E.1.b) for a discussion of increased transparency from expanding reporting requirements to include all broker-dealers.

[1875] *See, e.g.,* SIFMA Letter II at 25; Blackrock Letter at 3–4; State Street Letter at 2; Angel Letter at 3.

[1876] *See, e.g.,* FIF Letter at 32; SIFMA Letter II at 25; State Street Letter at 2; Angel Letter at 3; Tastytrade Letter at 4 and 6.

[1877] Some reporting entities, on the other hand, may incur lower costs if they pay a smaller proportion of CAT costs.

[1878] *See supra* section IX.C.1.b) for a discussion of broker-dealer reporting requirements under Rule 606.

[1879] *See* Robinhood Letter at 42, stating that ''. . . the SEC should require broker-dealers that already publish Rule 606 reports (which we expect would include all of the broker-dealers that would be subject to Proposed Rule 605, among others) to add execution quality statistics to their Rule 606 reports.''

with the initial reporting of execution quality information, such as building out systems to collect data and calculate metrics, would still be incurred by broker-dealers regardless of whether those metrics are reported via Rule 606 or Rule 605 reports.[1880] Furthermore, since Rule 606 reports are both more aggregated and less frequent than Rule 605 reports, the benefits of this alternative in terms of increased transparency would be substantially lower than those of the adopted amendments.[1881]

X. Regulatory Flexibility Act Certification

The RFA [1882] requires Federal agencies, in promulgating rules, to consider the impact of those rules on small entities. Section 603(a) [1883] of the Administrative Procedure Act,[1884] as amended by the RFA, generally requires the Commission to undertake a regulatory flexibility analysis of all proposed rules, or proposed rule amendments, to determine the impact of such rulemaking on ''small entities.'' [1885] Section 605(b) of the RFA states that this requirement shall not apply to any proposed rule or proposed rule amendment which, if adopted, would not have a significant economic impact on a substantial number of small entities.[1886]

In the Proposing Release, the Commission certified that the proposed amendments to Rules 600 and 605 would not have a significant economic impact on a substantial number of small entities for purposes of the RFA.[1887] The Commission solicited comments about whether the proposed rules would have a significant economic impact on a substantial number of small entities, and, if so, what would be the nature of any impact on small entities.[1888] No commenters responded to these requests with feedback on the economic impact of the proposed rules on small entities.[1889]

As adopted, the amendments to Rules 600 and 605 apply to market centers—which includes any exchange market maker, OTC market maker, ATS, national securities exchange registered with the Commission under section 6 of the Exchange Act, or national securities association registered with the Commission under section 15A of the Exchange Act—and certain brokers or dealers that are not a market center.[1890]

None of the exchanges registered under section 6 that will be subject to the proposed amendments are ''small entities'' for purposes of the RFA.[1891] There is only one national securities association, and it is not a small entity as defined by 13 CFR 121.201.[1892]

A broker-dealer is considered a small entity for purposes of Regulatory Flexibility Act if: (1) it had total capital of less than $500,000 on the date in the prior fiscal year as of which its audited financial statements were prepared, or, if not required to prepare such statements, it had total capital of less than $500,000 on the last business day of the preceding fiscal year; and (2) it is not affiliated with any person (other than a natural person) that is not a small entity. Applying this standard, the Commission estimates that, of the firms that will be impacted by the amendments, only one exchange market maker, no OTC market makers, no larger broker-dealers, and no ATSs are small entities.[1893] Because the Commission estimates that not more than one small entity will be required to comply with the rule changes, the Commission certifies that the amendments to Rule 605 will not have a significant economic impact on a substantial number of small entities for purposes of the RFA.

XI. Other Matters

If any of the provisions of these rules, or the application thereof to any person or circumstance, is held to be invalid, such invalidity shall not affect other provisions or application of such provisions to other persons or circumstances that can be given effect without the invalid provision or application.

Pursuant to the Congressional Review Act,[1894] the Office of Information and Regulatory Affairs has designated these rules as a ''major rule'', as defined by 5 U.S.C. 804(2).

Statutory Authority

Pursuant to the Exchange Act and particularly sections 3(b), 5, 6, 11A, 15, 17, 19, 23(a), 24, and 36 thereof, 15 U.S.C. 78c, 78e, 78f, 78k–1, 78*o,* 78q, 78s, 78w(a), 78x, and 78mm, the Commission is amending parts 240 and 242 of chapter II of title 17 of the Code of Federal Regulations.

List of Subjects in 17 CFR Parts 240 and 242

Brokers, Confidential business information, Fraud, Reporting and recordkeeping requirements, Securities.

For the reasons stated in the preamble, the Commission is amending title 17, chapter II of the Code of Federal Regulations:

PART 240—GENERAL RULES AND REGULATIONS, SECURITIES EXCHANGE ACT OF 1934

■ 1. The general authority citation for part 240 continues to read as follows:

Authority: 15 U.S.C. 77c, 77d, 77g, 77j, 77s, 77z–2, 77z–3, 77eee, 77ggg, 77nnn, 77sss, 77ttt, 78c, 78c–3, 78c–5, 78d, 78e, 78f, 78g, 78i, 78j, 78j–1, 78j–4, 78k, 78k–1, 78*l,* 78m, 78n, 78n–1, 78*o,* 78*o*–4, 78*o*–10, 78p,

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[1880] *See supra* section IX.D.2.a)(1) for further discussion of these costs.

[1881] Rule 605 reports would be more transparent because they are published each month and provide execution quality for individual stocks. In contrast, Rule 606 reports under this alternative would be published quarterly and would report aggregated execution quality metrics for S&P 500 and non-S&P 500 stocks for each market center included in the broker-dealer's Rule 606 report.

[1882] 5 U.S.C. 601 *et seq.*

[1883] 5 U.S.C. 603(a).

[1884] 5 U.S.C. 551 *et seq.*

[1885] Although section 601(b) of the RFA defines the term ''small entity,'' the statute permits agencies to formulate their own definitions. The Commission adopted definitions for the term ''small entity'' for purposes of Commission rulemaking in accordance with the RFA. Those definitions, as relevant to this proposed rulemaking, are set forth in 17 CFR 240.0–10.

[1886] *See* 5 U.S.C. 605(b).

[1887] *See* Proposing Release, 88 FR 3786 at 3901 (Jan. 20, 2023).

[1888] *See id.*

[1889] One commenter stated, in connection with the Proposing Release and multiple other Commission proposals, that the Commission should provide ''a reasonable, workable, and staggered schedule for public comment on the adoption and implementation of the proposals, considering their overlapping nature, significant compliance and operational burdens, and if they may be insurmountable for smaller or emerging firms.'' McHenry et al. letter at 2. The Commission has considered the potential effects of the Rule on smaller broker-dealers and the interactions of the final rule with certain other Commission rules. *See supra* section IX.D.1.d)(1) for a discussion of the potential effects of the amendments on smaller broker-dealers. See supra sections IX.C.1.d) and IX.D.2.a)(5) for a discussion of the interactions of the final rule with certain other Commission rules.

[1890] A broker or dealer that is not a market center will not be subject to the requirements unless it reaches or exceeds the customer account threshold. *See supra* section II.A.2.a).

[1891] *See* 17 CFR 240.0–10(e). The regulation at 17 CFR 240.0–10(e) states that the term ''small business,'' when referring to an exchange, means any exchange that has been exempted from the reporting requirements of 17 CFR 242.601 (''Rule 601'' of Regulation NMS), and is not affiliated with any person (other than a natural person) that is not a small business or small organization as defined in 17 CFR 240.0–10. The exchanges subject to this proposed rulemaking do not satisfy this standard. *See also* Securities Exchange Act Release Nos. 82873 (Mar. 14, 2018), 83 FR 13008, 13074 (Mar. 26, 2018) (File No. S7–05–18) (Transaction Fee Pilot for NMS Stocks Proposed Rule); 55341 (May 8, 2001), 72 FR 9412, 9419 (May 16, 2007) (File No. S7–06–07) (Proposed Rule Changes of Self-Regulatory Organizations Proposing Release).

[1892] *See, e.g.,* Securities Exchange Act Release No. 90610 (Dec. 9, 2020), 86 FR 18596 at 18808 & n.2549 (Apr. 9, 2021).

[1893] These estimates are based on the FYE 2022 FOCUS Reports received by the Commission from exchange market makers, OTC market makers, larger broker-dealers, and ATSs that would be subject to the changes proposed to 17 CFR 242.600 and 242.605.

[1894] 5 U.S.C. 801 *et seq.*

78q, 78q–1, 78s, 78u–5, 78w, 78x, 78dd, 78*ll,* 78mm, 80a–20, 80a–23, 80a–29, 80a–37, 80b–3, 80b–4, 80b–11, 7201 *et seq.,* and 8302; 7 U.S.C. 2(c)(2)(E); 12 U.S.C. 5221(e)(3); 18 U.S.C. 1350; and Pub. L. 111–203, 939A, 124 Stat. 1376 (2010); and Pub. L. 112–106, sec. 503 and 602, 126 Stat. 326 (2012), unless otherwise noted.

* * * * *

§ 240.3a51–1 [Amended]

■ 2. Amend § 240.3a51–1 by, in paragraph (a) introductory text, removing the text ''§ 242.600(b)(55)'' and adding in its place ''§ 242.600(b)(65)''.

§ 240.13h–1 [Amended]

■ 3. Amend § 240.13h–1 by, in paragraph (a)(5), removing the text ''§ 242.600(b)(54)'' and adding in its place ''§ 242.600(b)(64)''.

PART 242—REGULATIONS M, SHO, ATS, AC, NMS, AND SBSR AND CUSTOMER MARGIN REQUIREMENTS FOR SECURITY FUTURES

■ 4. The authority for part 242 continues to read as follows:

Authority: 15 U.S.C. 77g, 77q(a), 77s(a), 78b, 78c, 78c–4, 78g(c)(2), 78i(a), 78j, 78k–1(c), 78*l,* 78m, 78n, 78*o*(b), 78*o*(c), 78*o*(g), 78q(a), 78q(b), 78q(h), 78w(a), 78dd–1, 78mm, 80a–23, 80a–29, 80a–37, and 8343.

§ 242.105 [Amended]

■ 5. Amend § 242.105 by:
■ a. In paragraph (b)(1)(i)(C), removing the text ''§ 242.600(b)(30)'' and adding in its place ''§ 242.600(b)(35))''; and
■ b. In paragraph (b)(1)(ii), removing the text ''§ 242.600(b)(77)'' and adding in its place ''§ 242.600(b)(88)''.

§ 242.201 [Amended]

■ 6. Amend § 242.201 by:
■ a. In paragraph (a)(1), removing the text ''§ 242.600(b)(55)'' and adding in its place ''§ 242.600(b)(65)'';
■ b. In paragraph (a)(2), removing the text ''§ 242.600(b)(30)'' and adding in its place ''§ 242.600(b)(35)'';
■ c. In paragraph (a)(3), removing the text ''§ 242.600(b)(68)'' and adding in its place ''§ 242.600(b)(79)'';
■ d. In paragraph (a)(4), removing the text ''§ 242.600(b)(50)'' and adding in its place ''§ 242.600(b)(60)'';
■ e. In paragraph (a)(5), removing the text ''§ 242.600(b)(58)'' and adding in its place ''§ 242.600(b)(68)'';
■ f. In paragraph (a)(6), removing the text ''§ 242.600(b)(67)'' and adding in its place ''§ 242.600(b)(78)'';
■ g. In paragraph (a)(7), removing the text ''§ 242.600(b)(77)'' and adding in its place ''§ 242.600(b)(88)''; and
■ h. In paragraph (a)(9), removing the text ''§ 242.600(b)(95)'' and adding in its place ''§ 242.600(b)(106)''.

§ 242.204 [Amended]

■ 7. Amend § 242.204 by, in paragraph (g)(2), removing the text ''§ 242.600(b)(77) (Rule 600(b)(77) of Regulation NMS)'' and adding in its place ''§ 242.600(b)(88) (Rule 600(b)(88) of Regulation NMS)''.

■ 8. Amend § 242.600 by revising and republishing paragraph (b) to read as follows:

§ 242.600 NMS security designation and definitions.

* * * * *

(b) * * *

(1) *Actionable indication of interest* means any indication of interest that explicitly or implicitly conveys all of the following information with respect to any order available at the venue sending the indication of interest:

(i) Symbol;

(ii) Side (buy or sell);

(iii) A price that is equal to or better than the national best bid for buy orders and the national best offer for sell orders; and

(iv) A size that is at least equal to one round lot.

(2) *Administrative data* means administrative, control, and other technical messages made available by national securities exchanges and national securities associations pursuant to the effective national market system plan or plans required under § 242.603(b) or the technical specifications thereto as of April 9, 2021.

(3) *Aggregate quotation size* means the sum of the quotation sizes of all responsible brokers or dealers who have communicated on any national securities exchange bids or offers for an NMS security at the same price.

(4) *Alternative trading system* has the meaning provided in § 242.300(a).

(5) *Auction information* means all information specified by national securities exchange rules or effective national market system plans that is generated by a national securities exchange leading up to and during auctions, including opening, reopening, and closing auctions, and publicly disseminated during the time periods and at the time intervals provided in such rules and plans.

(6) *Automated quotation* means a quotation displayed by a trading center that:

(i) Permits an incoming order to be marked as immediate-or-cancel;

(ii) Immediately and automatically executes an order marked as immediate-or-cancel against the displayed quotation up to its full size;

(iii) Immediately and automatically cancels any unexecuted portion of an order marked as immediate-or-cancel without routing the order elsewhere;

(iv) Immediately and automatically transmits a response to the sender of an order marked as immediate-or-cancel indicating the action taken with respect to such order; and

(v) Immediately and automatically displays information that updates the displayed quotation to reflect any change to its material terms.

(7) *Automated trading center* means a trading center that:

(i) Has implemented such systems, procedures, and rules as are necessary to render it capable of displaying quotations that meet the requirements for an automated quotation set forth in paragraph (b)(6) of this section;

(ii) Identifies all quotations other than automated quotations as manual quotations;

(iii) Immediately identifies its quotations as manual quotations whenever it has reason to believe that it is not capable of displaying automated quotations; and

(iv) Has adopted reasonable standards limiting when its quotations change from automated quotations to manual quotations, and vice versa, to specifically defined circumstances that promote fair and efficient access to its automated quotations and are consistent with the maintenance of fair and orderly markets.

(8) *Average effective spread* means the share-weighted average of effective spreads for order executions calculated, for buy orders, as double the amount of difference between the execution price and the midpoint of the national best bid and national best offer at the time of order receipt and, for sell orders, as double the amount of difference between the midpoint of the national best bid and national best offer at the time of order receipt and the execution price. For order executions of midpoint-or-better limit orders, average effective spread shall be calculated from the time such orders first become executable rather than the time of order receipt.

(9) *Average midpoint* means the share-weighted average of the midpoint of the national best bid and national best offer at the time of order receipt or, for non-marketable limit orders, midpoint-or-better limit orders, and orders submitted with stop prices, at the time such orders first become executable.

(10) *Average percentage effective spread* means the average effective spread for order executions divided by the average midpoint for order executions.

(11) *Average percentage realized spread* means the average realized

spread for order executions divided by the average midpoint for order executions.

(12) *Average quoted spread* means the share-weighted average of the difference between the national best offer and the national best bid at the time of order receipt or, for order executions of midpoint-or-better limit orders, the difference between the national best offer and the national best bid at the time such orders first become executable.

(13) *Average realized spread* means the share-weighted average of realized spreads for order executions calculated, for buy orders, as double the amount of difference between the execution price and the midpoint of the national best bid and national best offer at a specified interval after the time of order execution and, for sell orders, as double the amount of difference between the midpoint and the national best bid and national best offer at a specified interval after the time of order execution and the execution price; provided, however, that the midpoint of the final national best bid and national best offer disseminated for regular trading hours shall be used to calculate a realized spread if it is disseminated less than that specified interval after the time of order execution.

(14) *Best available displayed price* means, with respect to an order to buy, the lower of: the national best offer at the time of order receipt or the price of the best odd-lot order to sell at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan; and, with respect to an order to sell, the higher of: the national best bid at the time of order receipt or the price of the best odd-lot order to buy at the time of order receipt as disseminated pursuant to an effective transaction reporting plan or effective national market system plan. With respect to a midpoint-or-better limit order, the best available displayed price shall be determined at the time such order becomes executable rather than the time of order receipt.

(15) *Best bid and best offer* mean the highest priced bid and the lowest priced offer.

(16) *Bid or offer* means the bid price or the offer price communicated by a member of a national securities exchange or member of a national securities association to any broker or dealer, or to any customer, at which it is willing to buy or sell one or more round lots of an NMS security, as either principal or agent, but shall not include indications of interest.

(17) *Block size with respect to* an order means it is:

(i) Of at least 10,000 shares; or

(ii) For a quantity of stock having a market value of at least $200,000.

(18) *Categorized by order size* means dividing orders into separate categories for the following sizes:

(i) Less than $250 and less than a share;

(ii) Less than $250 and odd-lot;

(iii) Less than $250 and at least a round lot;

(iv) $250 to less than $1,000 and less than a share;

(v) $250 to less than $1,000 and odd-lot;

(vi) $250 to less than $1,000 and at least a round lot;

(vii) $1,000 to less than $5,000 and less than a share;

(viii) $1,000 to less than $5,000 and odd-lot;

(ix) $1,000 to less than $5,000 and at least a round lot;

(x) $5,000 to less than $10,000 and less than a share;

(xi) $5,000 to less than $10,000 and odd-lot;

(xii) $5,000 to less than $10,000 and at least a round lot;

(xiii) $10,000 to less than $20,000 and less than a share;

(xiv) $10,000 to less than $20,000 and odd-lot;

(xv) $10,000 to less than $20,000 and at least a round lot;

(xvi) $20,000 to less than $50,000 and less than a share;

(xvii) $20,000 to less than $50,000 and odd-lot;

(xviii) $20,000 to less than $50,000 and at least a round lot;

(xix) $50,000 to less than $200,000 and less than a share;

(xx) $50,000 to less than $200,000 and odd-lot;

(xxi) $50,000 to less than $200,000 and at least a round lot;

(xxii) $200,000 or more and less than a share;

(xxiii) $200,000 or more and odd-lot; and

(xxiv) $200,000 or more and at least a round lot.

(19) *Categorized by order type* means dividing orders into separate categories for market orders, marketable limit orders (excluding immediate-or-cancel orders), marketable immediate-or-cancel orders, midpoint-or-better limit orders (excluding immediate-or-cancel orders), midpoint-or-better limit orders that are immediate-or-cancel, executable non-marketable limit orders (excluding orders submitted with stop prices, midpoint-or-better limit orders, and immediate-or-cancel orders), executable non-marketable orders that are immediate-or-cancel, executable market orders submitted with stop prices, executable stop marketable limit orders, and executable stop non-marketable limit orders.

(20) *Categorized by security* means dividing orders into separate categories for each NMS stock that is included in a report.

(21) *Competing consolidator* means a securities information processor required to be registered pursuant to § 242.614 (Rule 614) or a national securities exchange or national securities association that receives information with respect to quotations for and transactions in NMS stocks and generates a consolidated market data product for dissemination to any person.

(22) *Consolidated display* means:

(i) The prices, sizes, and market identifications of the national best bid and national best offer for a security; and

(ii) Consolidated last sale information for a security.

(23) *Consolidated last sale information* means the price, volume, and market identification of the most recent transaction report for a security that is disseminated pursuant to an effective national market system plan.

(24) *Consolidated market data* means the following data, consolidated across all national securities exchanges and national securities associations:

(i) Core data;

(ii) Regulatory data;

(iii) Administrative data;

(iv) Self-regulatory organization-specific program data; and

(v) Additional regulatory, administrative, or self-regulatory organization-specific program data elements defined as such pursuant to the effective national market system plan or plans required under § 242.603(b).

(25) *Consolidated market data product* means any data product developed by a competing consolidator that contains consolidated market data or data components of consolidated market data. For purposes of this paragraph (b)(25), data components of consolidated market data include the enumerated elements, and any subcomponent of the enumerated elements, of consolidated market data in paragraph (b)(24) of this section. All consolidated market data products must reflect data consolidated across all national securities exchanges and national securities associations.

(26) *Core data* means:

(i) The following information with respect to quotations for, and transactions in, NMS stocks:

(A) Quotation sizes;
(B) Aggregate quotation sizes;
(C) Best bid and best offer;
(D) National best bid and national best offer;
(E) Protected bid and protected offer;
(F) Transaction reports;
(G) Last sale data;
(H) Odd-lot information;
(I) Depth of book data; and
(J) Auction information.

(ii) For purposes of the calculation and dissemination of core data by competing consolidators, as defined in paragraph (b)(21) of this section, and the calculation of core data by self-aggregators, as defined in paragraph (b)(94) of this section, the best bid and best offer, national best bid and national best offer, protected bid and protected offer, and depth of book data shall include odd-lots that when aggregated are equal to or greater than a round lot; such aggregation shall occur across multiple prices and shall be disseminated at the least aggressive price of all such aggregated odd-lots.

(iii) Competing consolidators shall represent the quotation sizes of the following data elements, if disseminated in a consolidated market data product as defined in paragraph (b)(25) of this section, as the number of shares rounded down to the nearest multiple of a round lot: The best bid and best offer, national best bid and national best offer, protected bid and protected offer, depth of book data, and auction information.

(iv) Competing consolidators shall attribute the following data elements, if disseminated in a consolidated market data product as defined in paragraph (b)(25) of this section, to the national securities exchange or national securities association that is the source of each such data element: Best bid and best offer, national best bid and national best offer, protected bid and protected offer, transaction reports, last sale data, odd-lot information, depth of book data, and auction information.

(27) *Covered order* means any market order or any limit order (including immediate-or-cancel orders) received by a market center, broker, or dealer during regular trading hours at a time when a national best bid and national best offer is being disseminated and after the primary listing market has disseminated its first firm, uncrossed quotations in the security, and, if executed, is executed during regular trading hours; or any non-marketable limit order (including an order submitted with a stop price) received by a market center, broker, or dealer outside of regular trading hours, or at a time before the primary listing market has disseminated its first firm, uncrossed quotations in the security, or at a time when a national best bid and national best offer is not being disseminated and, if executed, is executed during regular trading hours. Covered order shall exclude any order for which the customer requests special handling for execution, including, but not limited to, orders to be executed at a market opening price or a market closing price, orders to be executed only at their full size, orders to be executed on a particular type of tick or bid, orders submitted on a ''not held'' basis, orders for other than regular settlement, and orders to be executed at prices unrelated to the market price of the security at the time of execution.

(28) *Customer* means any person that is not a broker or dealer.

(29) *Customer limit order* means an order to buy or sell an NMS stock at a specified price that is not for the account of either a broker or dealer; *provided, however,* that the term *customer limit order* shall include an order transmitted by a broker or dealer on behalf of a customer.

(30) *Customer order* means an order to buy or sell an NMS security that is not for the account of a broker or dealer, but shall not include any order for a quantity of a security having a market value of at least $50,000 for an NMS security that is an option contract and a market value of at least $200,000 for any other NMS security.

(31) *Depth of book data* means all quotation sizes at each national securities exchange and on a facility of a national securities association at each of the next five prices at which there is a bid that is lower than the national best bid and offer that is higher than the national best offer. For these five prices, the aggregate size available at each price, if any, at each national securities exchange and national securities association shall be attributed to such exchange or association.

(32) *Directed order* means an order from a customer that the customer specifically instructed the broker or dealer to route to a particular venue for execution.

(33) *Dynamic market monitoring device* means any service provided by a vendor on an interrogation device or other display that:

(i) Permits real-time monitoring, on a dynamic basis, of transaction reports, last sale data, or quotations with respect to a particular security; and

(ii) Displays the most recent transaction report, last sale data, or quotation with respect to that security until such report, data, or quotation has been superseded or supplemented by the display of a new transaction report, last sale data, or quotation reflecting the next reported transaction or quotation in that security.

(34) *Effective national market system plan* means any national market system plan approved by the Commission (either temporarily or on a permanent basis) pursuant to § 242.608.

(35) *Effective transaction reporting plan* means any transaction reporting plan approved by the Commission pursuant to § 242.601.

(36) *Electronic communications network* means, for the purposes of § 242.602(b)(5), any electronic system that widely disseminates to third parties orders entered therein by an exchange market maker or OTC market maker, and permits such orders to be executed against in whole or in part; except that the term *electronic communications network* shall not include:

(i) Any system that crosses multiple orders at one or more specified times at a single price set by the system (by algorithm or by any derivative pricing mechanism) and does not allow orders to be crossed or executed against directly by participants outside of such times; or

(ii) Any system operated by, or on behalf of, an OTC market maker or exchange market maker that executes customer orders primarily against the account of such market maker as principal, other than riskless principal.

(37) *Exchange market maker* means any member of a national securities exchange that is registered as a specialist or market maker pursuant to the rules of such exchange.

(38) *Exchange-traded security* means any NMS security or class of NMS securities listed and registered, or admitted to unlisted trading privileges, on a national securities exchange; *provided, however,* that securities not listed on any national securities exchange that are traded pursuant to unlisted trading privileges are excluded.

(39) *Executable* means, for any non-marketable buy order (excluding orders submitted with stop prices), that the limit price is equal to or greater than the national best bid during regular trading hours and after the primary listing market has disseminated its first firm, uncrossed quotations in the security, and, for any non-marketable sell order (excluding orders submitted with stop prices), that the limit price is equal to or less than the national best offer during regular trading hours and after the primary listing market has disseminated its first firm, uncrossed quotations in the security. Executable means, for any order submitted with a stop price, that the stop price has been triggered during regular trading hours

and after the primary listing market has disseminated its first firm, uncrossed quotations in the security. The time an order becomes executable shall be measured in increments of a millisecond or finer.

(40) *Executable stop marketable limit order* means, for buy orders, orders submitted with stop prices that have limit prices that are equal to or greater than the national best offer at the time such orders become executable, and, for sell orders, orders submitted with stop prices that have limit prices that are equal to or less than the national best bid at the time such orders become executable.

(41) *Executable stop non-marketable limit order* means, for buy orders, orders submitted with stop prices that have limit prices that are less than the national best offer at the time such orders become executable, and, for sell orders, orders submitted with stop prices that have limit prices that are greater than the national best bid at the time such orders become executable.

(42) *Executed at the quote* means, for buy orders, execution at a price equal to the national best offer at the time of order receipt and, for sell orders, execution at a price equal to the national best bid at the time of order receipt.

(43) *Executed outside the best available displayed price* means, for buy orders, execution at a price higher than the best available displayed price; and, for sell orders, execution at a price lower than the best available displayed price.

(44) *Executed outside the quote* means, for buy orders, execution at a price higher than the national best offer at the time of order receipt and, for sell orders, execution at a price lower than the national best bid at the time of order receipt.

(45) *Executed with price improvement* means, for buy orders, execution at a price lower than the national best offer at the time of order receipt and, for sell orders, execution at a price higher than the national best bid at the time of order receipt.

(46) *Executed with price improvement relative to the best available displayed price* means, for buy orders, execution at a price lower the best available displayed price and, for sell orders, execution at a price higher than the best available displayed price.

(47) *Intermarket sweep order* means a limit order for an NMS stock that meets the following requirements:

(i) When routed to a trading center, the limit order is identified as an intermarket sweep order; and

(ii) Simultaneously with the routing of the limit order identified as an intermarket sweep order, one or more additional limit orders, as necessary, are routed to execute against the full displayed size of any protected bid, in the case of a limit order to sell, or the full displayed size of any protected offer, in the case of a limit order to buy, for the NMS stock with a price that is superior to the limit price of the limit order identified as an intermarket sweep order. These additional routed orders also must be marked as intermarket sweep orders.

(48) *Interrogation device* means any securities information retrieval system capable of displaying transaction reports, last sale data, or quotations upon inquiry, on a current basis on a terminal or other device.

(49) *Joint self-regulatory organization plan* means a plan as to which two or more self-regulatory organizations, acting jointly, are sponsors.

(50) *Last sale data* means any price or volume data associated with a transaction.

(51) *Listed equity security* means any equity security listed and registered, or admitted to unlisted trading privileges, on a national securities exchange.

(52) *Listed option* means any option traded on a registered national securities exchange or automated facility of a national securities association.

(53) *Make publicly available* means posting on an internet website that is free and readily accessible to the public, furnishing a written copy to customers on request without charge, and notifying customers at least annually in writing that a written copy will be furnished on request.

(54) *Manual quotation* means any quotation other than an automated quotation.

(55) *Market center* means any exchange market maker, OTC market maker, alternative trading system, national securities exchange, or national securities association.

(56) *Marketable limit order* means, with respect to an order received at a time when a national best bid and national best offer is being disseminated and after the primary listing market has disseminated its first firm, uncrossed quotations in the security, any buy order with a limit price equal to or greater than the national best offer at the time of order receipt, or any sell order with a limit price equal to or less than the national best bid at the time of order receipt, and, with respect to an order received at a time when a national best bid and national best offer is not being disseminated, any buy order with a limit price equal to or greater than the national best offer at the time that the national best offer is first disseminated during regular trading hours after the time of order receipt, or any sell order with a limit price equal to or less than the national best bid time at the time that the national best bid is first disseminated during regular trading hours after the time of order receipt. For orders received at a time when the national best bid and national best offer is being disseminated but the primary listing market has not disseminated its first firm, uncrossed quotations in the security, whether an order is a marketable limit order shall be determined from the time that the primary listing market disseminates its first firm, uncrossed quotations in the security.

(57) *Midpoint-or-better limit order* means, with respect to an order received at a time when a national best bid and national best offer is being disseminated and the primary listing market has disseminated its first firm, uncrossed quotations in the security, any non-marketable buy order with a limit price that is equal to or higher than the midpoint of the national best bid and national best offer at the time of order receipt and any non-marketable sell order with a limit price that is equal to or lower than the midpoint of the national best bid and national best offer at the time of order receipt, and, with respect to an order received at a time when a national best bid and national best offer is not being disseminated, any non-marketable buy order with a limit price that is equal to or higher than the midpoint of the national best bid and national best offer at the time that the national best bid and national best offer is first disseminated after the time of order receipt, or any non-marketable sell order with a limit price that is equal to or lower than the midpoint of the national best bid and national best offer at the time that the national best bid and national best offer is first disseminated after the time of order receipt. For orders received at a time when the national best bid and national best offer is being disseminated but the primary listing market has not disseminated its first firm, uncrossed quotations in the security, whether an order is a midpoint-or-better limit order shall be determined from the time that the primary listing market disseminates its first firm, uncrossed quotations in the security.

(58) *Moving ticker* means any continuous real-time moving display of transaction reports or last sale data (other than a dynamic market monitoring device) provided on an interrogation or other display device.

(59) *Nasdaq security* means any registered security listed on The Nasdaq Stock Market, Inc.

(60) *National best bid and national best offer* means, with respect to quotations for an NMS stock, the best bid and best offer for such stock that are calculated and disseminated on a current and continuing basis by a competing consolidator or calculated by a self-aggregator and, for NMS securities other than NMS stocks, the best bid and best offer for such security that are calculated and disseminated on a current and continuing basis by a plan processor pursuant to an effective national market system plan; provided, that in the event two or more market centers transmit to the plan processor, a competing consolidator or a self-aggregator identical bids or offers for an NMS security, the best bid or best offer (as the case may be) shall be determined by ranking all such identical bids or offers (as the case may be) first by size (giving the highest ranking to the bid or offer associated with the largest size), and then by time (giving the highest ranking to the bid or offer received first in time).

(61) *National market system plan* means any joint self-regulatory organization plan in connection with:

(i) The planning, development, operation or regulation of a national market system (or a subsystem thereof) or one or more facilities thereof; or

(ii) The development and implementation of procedures and/or facilities designed to achieve compliance by self-regulatory organizations and their members with any section of this Regulation NMS and part 240, subpart A, of this chapter promulgated pursuant to section 11A of the Act (15 U.S.C. 78k–1).

(62) *National securities association* means any association of brokers and dealers registered pursuant to section 15A of the Act (15 U.S.C. 78o–3).

(63) *National securities exchange* means any exchange registered pursuant to section 6 of the Act (15 U.S.C. 78f).

(64) *NMS security* means any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in listed options.

(65) *NMS stock* means any NMS security other than an option.

(66) *Non-directed order* means any order from a customer other than a directed order.

(67) *Non-marketable limit order* means any limit order other than a marketable limit order.

(68) *Odd-lot* means an order for the purchase or sale of an NMS stock in an amount less than a round lot.

(69) *Odd-lot information* means:

(i) Odd-lot transaction data disseminated pursuant to the effective national market system plan or plans required under § 242.603(b) as of April 9, 2021; and

(ii) Odd-lots at a price greater than or equal to the national best bid and less than or equal to the national best offer, aggregated at each price level at each national securities exchange and national securities association.

(70) *Options class* means all of the put option or call option series overlying a security, as defined in section 3(a)(10) of the Act (15 U.S.C. 78c(a)(10)).

(71) *Options series* means the contracts in an options class that have the same unit of trade, expiration date, and exercise price, and other terms or conditions.

(72) *Order size benchmark* means the number of shares of the full displayed size of all protected bids at the same price as the national best bid at the time of order receipt, in the case of a market or limit order to sell, or the full displayed size of all protected offers at the same price as the national best offer at the time of order receipt, in the case of a market or limit order to buy. For midpoint-or-better limit orders, the full displayed size should be measured at the time the order becomes executable rather than the time of order receipt. For each order, the share count shall be capped at the order size.

(73) *Orders providing liquidity* means orders that were executed against after resting at a trading center.

(74) *Orders removing liquidity* means orders that executed against resting trading interest at a trading center.

(75) *OTC market maker* means any dealer that holds itself out as being willing to buy from and sell to its customers, or others, in the United States, an NMS stock for its own account on a regular or continuous basis otherwise than on a national securities exchange in amounts of less than block size.

(76) *Participants,* when used in connection with a national market system plan, means any self-regulatory organization which has agreed to act in accordance with the terms of the plan but which is not a signatory of such plan.

(77) *Payment for order flow* has the meaning provided in § 240.10b–10 of this chapter.

(78) *Plan processor* means any self-regulatory organization or securities information processor acting as an exclusive processor in connection with the development, implementation and/or operation of any facility contemplated by an effective national market system plan.

(79) *Primary listing exchange* means, for each NMS stock, the national securities exchange identified as the primary listing exchange in the effective national market system plan or plans required under § 242.603(b).

(80) *Profit-sharing relationship* means any ownership or other type of affiliation under which the broker or dealer, directly or indirectly, may share in any profits that may be derived from the execution of non-directed orders.

(81) *Protected bid or protected offer* means a quotation in an NMS stock that:

(i) Is displayed by an automated trading center;

(ii) Is disseminated pursuant to an effective national market system plan; and

(iii) Is an automated quotation that is the best bid or best offer of a national securities exchange, or the best bid or best offer of a national securities association.

(82) *Protected quotation* means a protected bid or a protected offer.

(83) *Published aggregate quotation size* means the aggregate quotation size calculated by a national securities exchange and displayed by a vendor on a terminal or other display device at the time an order is presented for execution to a responsible broker or dealer.

(84) *Published bid and published offer* means the bid or offer of a responsible broker or dealer for an NMS security communicated by it to its national securities exchange or association pursuant to § 242.602 and displayed by a vendor on a terminal or other display device at the time an order is presented for execution to such responsible broker or dealer.

(85) *Published quotation size* means the quotation size of a responsible broker or dealer communicated by it to its national securities exchange or association pursuant to § 242.602 and displayed by a vendor on a terminal or other display device at the time an order is presented for execution to such responsible broker or dealer.

(86) *Quotation* means a bid or an offer.

(87) *Quotation size,* when used with respect to a responsible broker's or dealer's bid or offer for an NMS security, means:

(i) The number of shares (or units of trading) of that security which such responsible broker or dealer has specified, for purposes of dissemination to vendors, that it is willing to buy at the bid price or sell at the offer price

comprising its bid or offer, as either principal or agent; or

(ii) In the event such responsible broker or dealer has not so specified, a normal unit of trading for that NMS security.

(88) *Regular trading hours* means the time between 9:30 a.m. and 4 p.m. Eastern Time, or such other time as is set forth in the procedures established pursuant to § 242.605(a)(3).

(89) *Regulatory data* means:

(i) Information required to be collected or calculated by the primary listing exchange for an NMS stock and provided to competing consolidators and self-aggregators pursuant to the effective national market system plan or plans required under § 242.603(b), including, at a minimum:

(A) Information regarding Short Sale Circuit Breakers pursuant to § 242.201;

(B) Information regarding Price Bands required pursuant to the Plan to Address Extraordinary Market Volatility (LULD Plan);

(C) Information relating to regulatory halts or trading pauses (news dissemination/pending, LULD, Market-Wide Circuit Breakers) and reopenings or resumptions;

(D) The official opening and closing prices of the primary listing exchange; and

(E) An indicator of the applicable round lot size.

(ii) Information required to be collected or calculated by the national securities exchange or national securities association on which an NMS stock is traded and provided to competing consolidators and self-aggregators pursuant to the effective national market system plan or plans required under § 242.603(b), including, at a minimum:

(A) Whenever such national securities exchange or national securities association receives a bid (offer) below (above) an NMS stock's lower (upper) LULD price band, an appropriate regulatory data flag identifying the bid (offer) as non-executable; and

(B) Other regulatory messages including subpenny execution and trade-though exempt indicators.

(iii) For purposes of paragraph (b)(89)(i)(C) of this section, the primary listing exchange that has the largest proportion of companies included in the S&P 500 Index shall monitor the S&P 500 Index throughout the trading day, determine whether a Level 1, Level 2, or Level 3 decline, as defined in self-regulatory organization rules related to Market-Wide Circuit Breakers, has occurred, and immediately inform the other primary listing exchanges of all such declines.

(90) *Responsible broker or dealer* means:

(i) When used with respect to bids or offers communicated on a national securities exchange, any member of such national securities exchange who communicates to another member on such national securities exchange, at the location (or locations) or through the facility or facilities designated by such national securities exchange for trading in an NMS security a bid or offer for such NMS security, as either principal or agent; *provided, however,* that, in the event two or more members of a national securities exchange have communicated on or through such national securities exchange bids or offers for an NMS security at the same price, each such member shall be considered a *responsible broker or dealer* for that bid or offer, subject to the rules of priority and precedence then in effect on that national securities exchange; and further provided, that for a bid or offer which is transmitted from one member of a national securities exchange to another member who undertakes to represent such bid or offer on such national securities exchange as agent, only the last member who undertakes to represent such bid or offer as agent shall be considered the *responsible broker or dealer for that bid or offer;* and

(ii) When used with respect to bids and offers communicated by a member of an association to a broker or dealer or a customer, the member communicating the bid or offer (regardless of whether such bid or offer is for its own account or on behalf of another person).

(91) *Revised bid or offer* means a market maker's bid or offer which supersedes its published bid or published offer.

(92) *Revised quotation size* means a market maker's quotation size which supersedes its published quotation size.

(93) *Round lot* means:

(i) For any NMS stock for which the prior calendar month's average closing price on the primary listing exchange was $250.00 or less per share, an order for the purchase or sale of an NMS stock of 100 shares;

(ii) For any NMS stock for which the prior calendar month's average closing price on the primary listing exchange was $250.01 to $1,000.00 per share, an order for the purchase or sale of an NMS stock of 40 shares;

(iii) For any NMS stock for which the prior calendar month's average closing price on the primary listing exchange was $1,000.01 to $10,000.00 per share, an order for the purchase or sale of an NMS stock of 10 shares;

(iv) For any NMS stock for which the prior calendar month's average closing price on the primary listing exchange was $10,000.01 or more per share, an order for the purchase or sale of an NMS stock of 1 share; and

(v) For any NMS stock for which the prior calendar month's average closing price is not available, an order for the purchase or sale of an NMS stock of 100 shares.

(94) *Self-aggregator* means a broker, dealer, national securities exchange, national securities association, or investment adviser registered with the Commission that receives information with respect to quotations for and transactions in NMS stocks, including all data necessary to generate consolidated market data, and generates consolidated market data solely for internal use. A self-aggregator may make consolidated market data available to its affiliates that are registered with the Commission for their internal use. Except as provided in the preceding sentence, a self-aggregator may not disseminate or otherwise make available consolidated market data, or components of consolidated market data, as provided in paragraph (b)(25) of this section, to any person.

(95) *Self-regulatory organization* means any national securities exchange or national securities association.

(96) *Self-regulatory organization-specific program data* means:

(i) Information related to retail liquidity programs specified by the rules of national securities exchanges and disseminated pursuant to the effective national market system plan or plans required under § 242.603(b) as of April 9, 2021; and

(ii) Other self-regulatory organization-specific information with respect to quotations for or transactions in NMS stocks as specified by the effective national market system plan or plans required under § 242.603(b).

(97) *Specified persons,* when used in connection with any notification required to be provided pursuant to § 242.602(a)(3) and any election (or withdrawal thereof) permitted under § 242.602(a)(5), means:

(i) Each vendor;

(ii) Each plan processor; and

(iii) The processor for the Options Price Reporting Authority (in the case of a notification for a subject security which is a class of securities underlying options admitted to trading on any national securities exchange).

(98) *Sponsor,* when used in connection with a national market system plan, means any self-regulatory organization which is a signatory to

such plan and has agreed to act in accordance with the terms of the plan.

(99) *SRO display-only facility* means a facility operated by or on behalf of a national securities exchange or national securities association that displays quotations in a security, but does not execute orders against such quotations or present orders to members for execution.

(100) *SRO trading facility* means a facility operated by or on behalf of a national securities exchange or a national securities association that executes orders in a security or presents orders to members for execution.

(101) *Subject security* means:

(i) With respect to a national securities exchange:

(A) Any exchange-traded security other than a security for which the executed volume of such exchange, during the most recent calendar quarter, comprised one percent or less of the aggregate trading volume for such security as reported pursuant to an effective transaction reporting plan or effective national market system plan; and

(B) Any other NMS security for which such exchange has in effect an election, pursuant to § 242.602(a)(5)(i), to collect, process, and make available to a vendor bids, offers, quotation sizes, and aggregate quotation sizes communicated on such exchange; and

(ii) With respect to a member of a national securities association:

(A) Any exchange-traded security for which such member acts in the capacity of an OTC market maker unless the executed volume of such member, during the most recent calendar quarter, comprised one percent or less of the aggregate trading volume for such security as reported pursuant to an effective transaction reporting plan or effective national market system plan; and

(B) Any other NMS security for which such member acts in the capacity of an OTC market maker and has in effect an election, pursuant to § 242.602(a)(5)(ii), to communicate to its association bids, offers, and quotation sizes for the purpose of making such bids, offers, and quotation sizes available to a vendor.

(102) *Time of order execution* means the time (at a minimum to the millisecond) that an order was executed at any venue.

(103) *Time of order receipt* means the time (at a minimum to the millisecond) that an order was received by a market center for execution, or in the case of a broker or dealer that is not acting as a market center, the time (at a minimum to the millisecond) that an order was received by the broker or dealer for execution.

(104) *Time of the transaction* has the meaning provided in § 240.10b–10 of this chapter.

(105) *Trade-through* means the purchase or sale of an NMS stock during regular trading hours, either as principal or agent, at a price that is lower than a protected bid or higher than a protected offer.

(106) *Trading center* means a national securities exchange or national securities association that operates an SRO trading facility, an alternative trading system, an exchange market maker, an OTC market maker, or any other broker or dealer that executes orders internally by trading as principal or crossing orders as agent.

(107) *Trading rotation* means, with respect to an options class, the time period on a national securities exchange during which:

(i) Opening, re-opening, or closing transactions in options series in such options class are not yet completed; and

(ii) Continuous trading has not yet commenced or has not yet ended for the day in options series in such options class.

(108) *Transaction report* means a report containing the price and volume associated with a transaction involving the purchase or sale of one or more round lots of a security.

(109) *Transaction reporting association* means any person authorized to implement or administer any transaction reporting plan on behalf of persons acting jointly under § 242.601(a).

(110) *Transaction reporting plan* means any plan for collecting, processing, making available or disseminating transaction reports with respect to transactions in securities filed with the Commission pursuant to, and meeting the requirements of, § 242.601.

(111) *Vendor* means any securities information processor engaged in the business of disseminating transaction reports, last sale data, or quotations with respect to NMS securities to brokers, dealers, or investors on a real-time or other current and continuing basis, whether through an electronic communications network, moving ticker, or interrogation device.

§ 242.602 [Amended]

■ 9. Amend § 242.602 by, in paragraphs (a)(5)(i) and (ii), removing the text ''§ 242.600(b)(90)'' and adding in its place ''§ 242.600(b)(101)''.

■ 10. Amend § 242.605 by revising the introductory text and paragraph (a) to read as follows:

§ 242.605 Disclosure of order execution information.

This section requires market centers, brokers, and dealers to make available standardized, monthly reports of statistical information concerning their order executions. This information is presented in accordance with uniform standards that are based on broad assumptions about order execution and routing practices. The information will provide a starting point to promote visibility and competition on the part of market centers and broker-dealers, particularly on the factors of execution price and speed. The disclosures required by this section do not encompass all of the factors that may be important to investors in evaluating the order routing services of a broker-dealer. In addition, any particular market center, broker, or dealer's statistics will encompass varying types of orders routed by different broker-dealers on behalf of customers with a wide range of objectives. Accordingly, the statistical information required by this section alone does not create a reliable basis to address whether any particular broker-dealer failed to obtain the most favorable terms reasonably available under the circumstances for customer orders.

(a) *Monthly electronic reports by market centers, brokers, and dealers.* (1) Every market center, broker, or dealer shall make available for each calendar month, in accordance with the procedures established pursuant to paragraph (a)(3) of this section, a report on the covered orders in NMS stocks that it received for execution from any person or that it received for execution in a prior calendar month but which remained open. Any OTC market maker that provides a trading system for only a single dealer to solely buy and sell securities against all other persons entering orders in that system shall produce a separate report pertaining only to covered orders entered in such trading system. Alternative trading systems (as defined in § 242.300(a)) shall prepare reports separately from their broker-dealer operators to the extent such entities are required to prepare reports. Each report shall be in electronic form; shall be categorized by security, order type, and order size; and shall include the following columns of information:

(i) For market orders, marketable limit orders, marketable immediate-or-cancel orders, midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable non-marketable limit orders, executable non-marketable limit orders that are immediate-or-cancel, executable market

orders submitted with stop prices, executable stop marketable limit orders, and executable stop non-marketable limit orders:

(A) The number of covered orders;

(B) The cumulative notional value of covered orders;

(C) The cumulative number of shares of covered orders;

(D) The cumulative number of shares of covered orders cancelled prior to execution;

(E) The cumulative number of shares of covered orders executed at the receiving market center, broker, or dealer (excluding shares that the market center, broker, or dealer executes on a riskless principal basis);

(F) The cumulative number of shares of covered orders executed at any other venue;

(G) The cumulative number of shares of covered orders executed less than 100 microseconds after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(H) The cumulative number of shares of covered orders executed from 100 microseconds to less than 1 millisecond after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable ;

(I) The cumulative number of shares of covered orders executed from 1 millisecond to less than 10 milliseconds after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(J) The cumulative number of shares of covered orders executed from 10 milliseconds to less than 1 second after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(K) The cumulative number of shares of covered orders executed from 1 second to less than 10 seconds after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(L) The cumulative number of shares of covered orders executed from 10 seconds to less than 30 seconds after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(M) The cumulative number of shares of covered orders executed from 30 seconds to less than 5 minutes after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(N) The cumulative number of shares of covered orders executed 5 minutes or more after the time of order receipt; or, for non-marketable limit orders or orders submitted with stop prices, after the time the order becomes executable;

(O) For executions of covered orders, the average realized spread as calculated 50 milliseconds after the time of execution;

(P) For executions of covered orders, the average percentage realized spread as calculated 50 milliseconds after the time of execution;

(Q) For executions of covered orders, the average realized spread as calculated 1 second after the time of execution;

(R) For executions of covered orders, the average percentage realized spread as calculated 1 second after the time of execution;

(S) For executions of covered orders, the average realized spread as calculated 15 seconds after the time of execution;

(T) For executions of covered orders, the average percentage realized spread as calculated 15 seconds after the time of execution;

(U) For executions of covered orders, the average realized spread as calculated 1 minute after the time of execution;

(V) For executions of covered orders, the average percentage realized spread as calculated 1 minute after the time of execution;

(W) For executions of covered orders, the average realized spread as calculated 5 minutes after the time of execution;

(X) For executions of covered orders, the average percentage realized spread as calculated 5 minutes after the time of execution;

(Y) For executions of covered orders, the average midpoint; and

(ii) For market orders, marketable limit orders, marketable immediate-or-cancel orders, midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable market orders submitted with stop prices, and executable stop marketable limit orders:

(A) For executions of covered orders, the average quoted spread;

(B) For executions of covered orders, the average effective spread;

(C) For executions of covered orders, the average percentage effective spread;

(D) For executions of covered orders, the average effective divided by the average quoted spread, expressed as a percentage;

(E) The cumulative number of shares of covered orders executed with price improvement;

(F) For shares executed with price improvement, the share-weighted average amount per share that prices were improved;

(G) For shares executed with price improvement, the share-weighted average period from the time of order receipt to the time of order execution, expressed in increments of a millisecond or finer, or, in the case of midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable market orders submitted with stop prices, and executable stop marketable limit orders, from the time such orders first become executable to the time of order execution, expressed in increments of a millisecond or finer;

(H) The cumulative number of shares of covered orders executed at the quote;

(I) For shares executed at the quote, the share-weighted average period from the time of order receipt to the time of order execution, expressed in increments of a millisecond or finer, or, in the case of midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable market orders submitted with stop prices, and executable stop marketable limit orders, from the time such orders first become executable to the time of order execution, expressed in increments of a millisecond or finer;

(J) The cumulative number of shares of covered orders executed outside the quote;

(K) For shares executed outside the quote, the share-weighted average amount per share that prices were outside the quote;

(L) For shares executed outside the quote, the share-weighted average period from the time of order receipt, expressed in increments of a millisecond or finer, or, in the case of midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable market orders submitted with stop prices, and executable stop marketable limit orders, from the time such orders first become executable to the time of order execution, expressed in increments of a millisecond or finer;

(M) The cumulative number of shares of covered orders executed with price improvement relative to the best available displayed price;

(N) For shares executed with price improvement relative to the best available displayed price, the share-weighted average amount per share that prices were improved as compared to the best available displayed price;

(O) The cumulative number of shares of covered orders executed at the best available displayed price;

(P) The cumulative number of shares of covered orders executed outside the best available displayed price;

(Q) For shares executed outside the best available displayed price, the share-weighted average amount per share that prices were outside the best available displayed price;

(R) For executions of covered orders, the cumulative number of shares of the order size benchmark;

(S) The sum of, for each execution of a covered order, the greater of: the total number of shares executed with price improvement plus the total number of shares executed at the quote minus the order size benchmark, or zero; and

(iii) For midpoint-or-better limit orders, midpoint-or-better limit orders that are immediate-or-cancel, executable non-marketable limit orders, executable non-marketable limit orders that are immediate-or-cancel, and executable stop non-marketable limit orders:

(A) The number of covered orders that received either a complete or partial fill;

(B) The cumulative number of shares executed regular way at prices that could have filled the order while the order was in force, as reported pursuant to an effective transaction reporting plan or effective national market system plan. For each order, the share count shall be capped at the order size;

(C) The cumulative number of shares executed regular way on any national securities exchange at prices that could have filled the order while the order was in force, as reported pursuant to an effective transaction reporting plan or effective national market system plan. For each order, the share count shall be capped at the order size; and

(D) For shares executed, the share-weighted average period from the time the order becomes executable to the time of order execution expressed in increments of a millisecond or finer.

(2) Every market center, broker, or dealer shall make publicly available for each calendar month a report providing summary statistics on all covered orders that are market and marketable limit orders that it received for execution from any person. Such report shall be made available as an electronic file using the most recent version of the schema for comma separated values format (CSV) and the associated PDF renderer as published on the Commission's website for all reports required by this paragraph (a)(2). Such report shall include a section for NMS stocks that are included in the S&P 500 Index as of the first day of that month and a section for other NMS stocks. Each section shall be categorized by order type (market orders or marketable limit orders) and order size (less than $250, $250 to less than $1,000, $1,000 to less than $5,000, $5,000 to less than $10,000, $10,000 to less than $20,000, $20,000 to less than $50,000, $50,000 to less than $200,000, $200,000 or more, and all order sizes combined, excluding orders with a notional value of $200,000 or more), and shall include the following columns of information:

(i) The average order size in shares;

(ii) The average notional order size;

(iii) For executions of covered orders, the average midpoint;

(iv) For executions of covered orders, the percentage of shares executed at the quote or better;

(v) For executions of covered orders, the percentage of shares that received price improvement;

(vi) For executions of covered orders, the share-weighted average percentage price improvement, calculated as the cumulative amount that prices were improved less the cumulative amount that prices were executed outside the quote divided by sum of the average midpoint times the number of shares executed;

(vii) For executions of covered orders, the average percentage effective spread;

(viii) For executions of covered orders, the average percentage quoted spread, calculated as the average quoted spread divided by the average midpoint for such orders;

(ix) For executions of covered orders, the average effective spread divided by the average quoted spread, expressed as a percentage;

(x) For executions of covered orders, the average percentage realized spread as calculated 15 seconds after the time of execution;

(xi) For executions of covered orders, the average percentage realized spread as calculated 1 minute after the time of execution; and

(xii) For executions of covered orders, the share-weighted average execution speed, in milliseconds.

(3) Every national securities exchange on which NMS stocks are traded and each national securities association shall act jointly in establishing procedures for market centers, brokers, and dealers to follow in making available to the public the reports required by this section in a uniform, readily accessible, and usable electronic form.

(4) In the event there is no effective national market system plan establishing such procedures, market centers, brokers, and dealers shall prepare their reports in a consistent, usable, and machine-readable electronic format, in accordance with the requirements in paragraph (a)(1) of this section, and make such reports available for downloading from an internet website that is free and readily accessible to the public.

(5) Every market center, broker, or dealer shall keep the reports required by paragraphs (a)(1) and (2) of this section posted on an internet website that is free and readily accessible to the public for a period of three years from the initial date of posting on the internet website.

(6) A market center, broker, or dealer shall make available the reports required by paragraphs (a)(1) and (2) of this section within one month after the end of the month addressed in the reports.

(7) A broker or dealer that is not a market center shall not be subject to the requirements of this section unless that broker or dealer introduces or carries 100,000 or more customer accounts through which transactions are effected for the purchase or sale of NMS stocks (the ''customer account threshold'' for purposes of this paragraph). For purposes of this section, a broker or dealer that utilizes an omnibus clearing arrangement with respect to any of its underlying customer accounts shall be considered to carry such underlying customer accounts when calculating the number of customer accounts that it introduces or carries. Any broker or dealer that meets or exceeds this customer account threshold and is also a market center shall produce separate reports pertaining to each function. A broker or dealer that meets or exceeds the customer account threshold shall be required to produce reports pursuant to this section for at least three calendar months (''Reporting Period''). The Reporting Period shall begin the first calendar day of the next calendar month after the broker or dealer met or exceeded the customer account threshold, unless it is the first time the broker or dealer has met or exceeded the customer account threshold, in which case the Reporting Period shall begin the first calendar day four calendar months later. If, at any time after a broker or dealer has been required to produce reports pursuant to this section for at least a Reporting Period, a broker or dealer falls below the customer account threshold, the broker or dealer shall not be required to produce a report pursuant to this paragraph (a)(7) for the next calendar month.

* * * * *

§ 242.611 [Amended]

■ 11. Amend § 242.611 by, in paragraph (c), removing the text ''§ 242.600(b)(38)'' and adding in its place ''§ 242.600(b)(47)''.

§ 242.614 [Amended]

■ 12. Amend § 242.614 by, in paragraphs (d)(1) through (3), removing the text ''§ 242.600(b)(20)'' and adding in its place ''§ 242.600(b)(25)''.

§ 242.1000 [Amended]

■ 13. Amend § 242.1000, in the definition *Plan processor,* by removing the text ''§ 242.600(b)(67)'' and adding in its place ''§ 242.600(b)(78)''.

By the Commission.

Dated: March 6, 2024.

Sherry R. Haywood,

Assistant Secretary.

[FR Doc. 2024–05556 Filed 4–12–24; 8:45 am]

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Part IV

Environmental Protection Agency

40 CFR Part 50
Review of the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter; Proposed Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 50

[EPA–HQ–OAR–2014–0128; FRL–5788–02–OAR]

RIN 2060–AS35

Review of the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Based on the Environmental Protection Agency's (EPA's) review of the air quality criteria and national ambient air quality standards (NAAQS) for oxides of nitrogen (N oxides), oxides of sulfur (SO_X), and particulate matter (PM), the Environmental Protection Agency (EPA) proposes to revise the existing secondary sulfur dioxide (SO_2) standard to an annual average, averaged over three consecutive years, with a level within the range from 10 to 15 parts per billion (ppb). Additionally, the Agency proposes to retain the existing secondary standards for N oxides and PM, without revision. The EPA also proposes revisions to the data handling requirements for the proposed secondary SO_2 NAAQS.

DATES: Comments must be received on or before June 14, 2024.

Public Hearings: The EPA will hold a virtual public hearing on this proposed rule. This hearing will be announced in a separate **Federal Register** notice that provides details, including specific dates, times, and contact information for these hearings.

ADDRESSES: You may submit comments, identified by Docket ID No. EPA–HQ–OAR–2014–0128, by any of the following means:

- *Federal eRulemaking Portal: https://www.regulations.gov/* (our preferred method). Follow the online instructions for submitting comments.
- *Email: a-and-r-Docket@epa.gov.* Include the Docket ID No. EPA–HQ–OAR–2014–0128 in the subject line of the message.
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Air and Radiation Docket, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- *Hand Delivery or Courier (by scheduled appointment only):* EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. for this document. Comments received may be posted without change to *https://www.regulations.gov,* including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Ms. Ginger Tennant, Health and Environmental Impacts Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Mail Code C539–04, Research Triangle Park, NC 27711; telephone: (919) 541–4072; email: *tennant.ginger@epa.gov.*

SUPPLEMENTARY INFORMATION:

General Information

Preparing Comments for the EPA

Follow the online instructions for submitting comments. Once submitted to the Federal eRulemaking Portal, comments cannot be edited or withdrawn. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written submission. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.,* on the web, the cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit *https://www.epa.gov/dockets/commenting-epa-dockets.*

When submitting comments, remember to:

- Identify the action by docket number and other identifying information (subject heading, **Federal Register** date and page number).
- Explain why you agree or disagree, suggest alternatives, and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- Provide specific examples to illustrate your concerns and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the comment period deadline identified.

Availability of Information Related to This Action

All documents in the dockets pertaining to this action are listed on the *www.regulations.gov* website. This includes documents in the docket for the proposed decision (Docket ID No. EPA–HQ–OAR–2014–0128) and a separate docket, established for the Integrated Science Assessment (ISA) (Docket ID No. EPA–HQ–ORD–2013–0620) that has been incorporated by reference into the docket for this proposed decision. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and may be viewed with prior arrangement with the EPA Docket Center. Additionally, a number of the documents that are relevant to this proposed decision are available through the EPA's website at *https://www.epa.gov/naaqs/.* These documents include the Integrated Science Assessment for Oxides of Nitrogen, Oxides of Sulfur and Particulate Matter Ecological Criteria (U.S. EPA, 2020a), available at *https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=349473,* and the Policy Assessment for the Review of the Secondary National Ambient Air Quality Standards for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter, (U.S. EPA, 2024), available at *https://www.epa.gov/naaqs/nitrogen-dioxide-no2-and-sulfur-dioxide-so2-secondary-air-quality-standards.*

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Executive Summary

This document presents the Administrator's proposed decisions in the current review of the secondary NAAQS for SO_X, N oxides, and PM. The existing secondary standards are: for SO_2, 0.5 ppm as a 3-hour average not to be exceeded more than once in a year; for NO_2, 53 ppb as an annual average; for $PM_{2.5}$, 15.0 μg/m^3 as the 3-year average of annual averages, and 35 μg/m^3 as the 3-year average of annual 98th percentile 24-hour averages; and, for PM_{10}, 150 μg/m^3 as a 24-hour average, not to be exceeded more than once per year on average over three years. Sections 108 and 109 of the Clean Air Act (CAA, the Act) require the EPA to periodically review the air quality criteria—the science upon which the standards are based—and the standards themselves. Under section 109(b)(2) of the Act, a secondary standard must ''specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of [the] pollutant in the ambient air.'' In conducting this review of the secondary SO_X, N oxides, and PM NAAQS, the EPA has carefully evaluated the currently available scientific literature on the ecological effects of SO_X, N oxides, and PM,[1] focusing particularly on the new literature available since the conclusion of the previous reviews in 2012 and 2013, respectively, as described in the Integrated Science Assessment (ISA). The ecological effects addressed in this review include direct effects of N oxides and SO_X, and PM loading, on vegetation surfaces, as well as ecological effects related to atmospheric deposition of S and N compounds in sensitive ecosystems.

Sulfur oxides and N oxides, their transformation products (which include particulate compounds), and N- and S-containing components of PM in ambient air can contribute to atmospheric deposition of S and N compounds. Emissions of SO_X, N oxides, PM and PM precursors have declined dramatically over the past two decades, continuing a longer-term trend. In response to the reductions in S- and N-containing compounds, levels of S and N deposition have also been reduced, although the declining trend in N deposition in the last decade has slowed and, in some areas, reversed, due to increasing ammonia emissions.

The Administrator's proposed decision in this review is to revise the existing secondary SO_2 standard and to retain the existing secondary standards for N oxides and PM. In this document, the EPA summarizes the background and rationale for the Administrator's proposed decisions in this review. The EPA solicits comment on the proposed decisions described here and on a number of alternate options, and requests commenters also provide the rationales supporting the views articulated in submitted comments.

The Administrator's proposed decisions are based on his consideration of the characterization of the available scientific evidence in the ISA, quantitative and policy analyses presented in the Policy Assessment (PA), and advice from the Clean Air Scientific Advisory Committee (CASAC).[2] In conveying its advice in this review, the CASAC provided consensus advice that the existing SO_2 and NO_2 secondary standards were adequate to protect against direct effects of S and N oxides on plants and lichens. With regard to deposition-related effects and SO_2, the majority of CASAC recommended an annual secondary standard of 10–15 ppb, and the minority recommended a secondary standard identical to the existing primary standard. In consideration of deposition-related effects and the NO_2 and $PM_{2.5}$ secondary standards, the

[1] The ecological effects of PM that are the focus of this action were not considered in EPA's recently completed reconsideration of the primary and secondary NAAQS for PM. In the review of the PM secondary standards completed in 2020, and reconsidered more recently, the EPA considered effects on visibility and climate and materials damage, but did not consider the ecological effects that are addressed here (89 FR 16202, March 6, 2024).

[2] Over the course of this review, the EPA developed planning documents, an ISA and a PA, drafts of which were made available for public comment and reviewed by the CASAC Oxides of Nitrogen, Oxides of Sulfide and Particulate Matter Secondary NAAQS Panel (*https://www.epa.gov/naaqs/nitrogen-dioxide-no2-and-sulfur-dioxide-so2-secondary-air-quality-standards*).

CASAC majority recommended revision of the levels of the existing annual NO_2 and $PM_{2.5}$ secondary standards, and the minority recommended adopting secondary standards identical to the existing annual NO_2 and $PM_{2.5}$ primary standards.

Based on his consideration of the ecological effects evidence in the ISA, the evaluations and quantitative information in the PA, including the quantitative REA for aquatic acidification, and advice from the CASAC, the Administrator is proposing that the current short-term secondary SO_2 standard is not requisite to protect the public welfare from known or anticipated adverse effects associated with the presence of SO_X in ambient air, including particularly deposition-related effects, and that it should be revised to also provide such protection against effects related to deposition of sulfur (S) compounds to ecosystems. Specifically, the EPA is proposing to revise the existing standard to be an annual average standard, averaged over three years, with a level within the range from 10 to 15 parts per billion (ppb) based on the Administrator's proposed judgment that a standard in this range would provide protection for both direct effects on vegetation surfaces and ecosystem deposition-related effects. The EPA solicits comments on this proposal, including the averaging time, form and range of levels for the revised standard. The EPA also solicits comments on a number of alternative options for a new secondary SO_2 standard. The EPA solicits comment on setting the level for a new annual average standard (averaged over three years) in the range from 5 to 10 ppb, and on revising the existing secondary standard to be identical to the existing primary standard in all respects. Further, the EPA solicits comments on retaining the existing 3-hour standard, in addition to establishing a new annual secondary standard.

The Administrator is also proposing to retain the secondary nitrogen dioxide (NO_2) and PM standards, without revision. With regard to the secondary NO_2 standard, the Administrator finds that the evidence related to the N oxides, NO_2 and nitrogen oxide (NO), does not clearly call into question the adequacy of protection provided by the existing standard for direct effects or for deposition-related effects (in light of the currently diminished role of N oxides in total N deposition, particularly in areas with highest deposition), such that revision is not warranted. The EPA solicits comment on the proposed decision to retain the existing secondary NO_2 standard, without revision, and also on the alternative approach of revising the form of the existing standard to a 3-year average and the level to a value within the range from 35 to 40 ppb.

With regard to PM, the Administrator proposes to conclude that the current evidence does not call into question the adequacy of the existing PM standards with regard to direct effects and deposition of pollutants other than S and N compounds. Further, he judges that protection of sensitive ecosystems from S deposition is more effectively achieved through a revised SO_2 standard than a PM standard, and that a revised PM standard is not warranted to provide public welfare protection against adverse effects related to S or N deposition. The Administrator additionally proposes to conclude that $PM_{2.5}$ is not an appropriate indicator for a secondary standard intended to provide protection of the public welfare from adverse effects related to S or N deposition. Thus, based on consideration of the PA analyses and conclusions, and consideration of CASAC advice, the Administrator proposes to conclude that no change to the annual $PM_{2.5}$ secondary standard is warranted and he proposes to retain the existing $PM_{2.5}$ secondary standard, without revision. The EPA solicits comment on the proposed decision. Additionally, in recognizing that there may be alternate views with regard to whether and to what extent a standard with a $PM_{2.5}$ indicator might be expected to provide control of N deposition, and in light of the rationale provided by the CASAC minority, the EPA also solicits comment on the alternative approach of revising the secondary $PM_{2.5}$ (with $PM_{2.5}$ referring to particles with a nominal mean aerodynamic diameter less than or equal to 2.5 micrometers) annual standard to a level of 12 micrograms per meter cubed ($\mu g/m^3$). With regard to other PM secondary standards, based on evaluations and conclusions of the PA, including consideration of recommendations from the CASAC, the Administrator proposes to retain the existing 24-hour secondary $PM_{2.5}$ standard, without revision. Further, based on the lack of evidence calling into question the adequacy of the secondary PM_{10} standards for protection of ecological effects, he also proposes to retain the secondary PM_{10} standards without revision.

This document additionally includes proposed revisions related to implementation of the proposed secondary SO_2 annual standard. Specifically, the EPA is proposing revisions to the data handling requirements in appendix T of 40 CFR part 50 to include specifications needed for the proposed new annual average standard. This document also describes the SO_2 monitoring network and its adequacy for surveillance for the proposed annual standard. Lastly, the document discusses implementation processes pertinent to implementation of the proposed new standard.

I. Background

A. Legislative Requirements

Two sections of the CAA govern the establishment and revision of the NAAQS. Section 108 (42 U.S.C. 7408) directs the Administrator to identify and list certain air pollutants and then to issue air quality criteria for those pollutants. The Administrator is to list those pollutants ''emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare''; ''the presence of which in the ambient air results from numerous or diverse mobile or stationary sources''; and for which he ''plans to issue air quality criteria. . . .'' (42 U.S.C. 7408(a)(1)). Air quality criteria are intended to ''accurately reflect the latest scientific knowledge useful in indicating the kind and extent of all identifiable effects on public health or welfare which may be expected from the presence of [a] pollutant in the ambient air. . . .'' 42 U.S.C. 7408(a)(2).

Section 109 of the Act (42 U.S.C. 7409) directs the Administrator to propose and promulgate ''primary'' and ''secondary'' NAAQS for pollutants for which air quality criteria are issued [42 U.S.C. 7409(a)]. Under section 109(b)(2), a secondary standard must ''specify a level of air quality the attainment and maintenance of which, in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of [the] pollutant in the ambient air.'' [3]

In setting primary and secondary standards that are ''requisite'' to protect public health and welfare, respectively, as provided in section 109(b), the EPA's task is to establish standards that are neither more nor less stringent than necessary. In so doing, the EPA may not consider the costs of implementing the standards. See generally, *Whitman* v.

[3] Under CAA section 302(h) (42 U.S.C. 7602(h)), effects on welfare include, but are not limited to, ''effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.''

American Trucking Ass'ns, 531 U.S. 457, 465–472, 475–76 (2001). Likewise, ''[a]ttainability and technological feasibility are not relevant considerations in the promulgation of national ambient air quality standards'' (*American Petroleum Institute* v. *Costle,* 665 F.2d 1176, 1185 [D.C. Cir. 1981]). However, courts have clarified that in deciding how to revise the NAAQS in the context of considering standard levels within the range of reasonable values supported by the air quality criteria and judgments of the Administrator, EPA may consider ''relative proximity to peak background . . . concentrations'' as a factor (*American Trucking Ass'ns,* v. *EPA,* 283 F.3d 355, 379 [D.C. Cir. 2002]).

Section 109(d)(1) of the Act requires periodic review and, if appropriate, revision of existing air quality criteria to reflect advances in scientific knowledge on the effects of the pollutant on public health and welfare. Under the same provision, the EPA is also to periodically review and, if appropriate, revise the NAAQS, based on the revised air quality criteria.[4]

Section 109(d)(2) addresses the appointment and advisory functions of an independent scientific review committee. Section 109(d)(2)(A) requires the Administrator to appoint this committee, which is to be composed of ''seven members including at least one member of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies.'' Section 109(d)(2)(B) provides that the independent scientific review committee ''shall complete a review of the criteria . . . and the national primary and secondary ambient air quality standards . . . and shall recommend to the Administrator any new . . . standards and revisions of existing criteria and standards as may be appropriate. . . .'' Since the early 1980s, this independent review function has been performed by the CASAC of the EPA's Science Advisory Board.

Section 109(b)(2) specifies that ''[a]ny national secondary ambient air quality standard prescribed under subsection (a) shall specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator, based on such criteria, is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air.'' Consistent with this statutory direction, EPA has always understood the goal of the NAAQS is to identify a requisite level of air quality, and the means of achieving a specific level of air quality is to set a standard expressed as a concentration of a pollutant in the air, such as in terms of parts per million (ppm), parts per billion (ppb), or micrograms per cubic meter ($\mu g/m^3$). Thus, while deposition-related effects are included within the ''adverse effects associated with the presence of such air pollutant in the ambient air,'' EPA has never found a standard that quantifies atmospheric deposition onto surfaces to constitute a national secondary ambient air quality standard.

B. Related Control Programs

States are primarily responsible for ensuring attainment and maintenance of ambient air quality standards once the EPA has established them. Under CAA sections 110 and part D, subparts 1, 5, and 6 for nitrogen and sulfur oxides, and subparts 1, 4, and 6 for PM, and related provisions and regulations, States are to submit, for the EPA's approval, State implementation plans (SIPs) that provide for the attainment and maintenance of such standards through control programs directed to sources of the pollutants involved. The States, in conjunction with the EPA, also administer the prevention of significant deterioration of air quality program that covers these pollutants. *See* 42 U.S.C. 7470–7479. In addition, Federal programs provide for or result in nationwide reductions in emissions of N oxides, SO_X, PM and other air pollutants under title II of the Act, 42 U.S.C. 7521–7574, which involves controls for motor vehicles, nonroad engines and equipment, and the new source performance standards under section 111 of the Act, 42 U.S.C. 7411.

C. History of the Secondary Standards for N Oxides, SO_X and PM

Secondary NAAQS were first established for N oxides, SO_X and PM in 1971 (36 FR 8186, April 30, 1971). Since that time, the EPA has periodically reviewed the air quality criteria and secondary standards for these pollutants, with the most recent reviews that considered the evidence for ecological effects of these pollutants being completed in 2012 and 2013 (77 FR 20218, April 3, 2012; 78 FR 3086, January 15, 2013). The subsections below summarize key proceedings from the initial standard setting in 1971 to the last reviews in 2012–2013.[5]

1. N Oxides

The EPA first promulgated NAAQS for N oxides in April 1971 after reviewing the relevant science on the public health and welfare effects in the 1971 Air Quality Criteria for Nitrogen Oxides (air quality criteria document or AQCD).[6] With regard to welfare effects, the 1971 AQCD described effects of NO_2 on vegetation and corrosion of electrical components linked to particulate nitrate (U.S. EPA, 1971). The primary and secondary standards were both set at 0.053 parts per million (ppm) NO_2 as an annual average (36 FR 8186, April 30, 1971). In 1982, the EPA published an updated AQCD (U.S. EPA, 1982a). Based on the 1982 AQCD, the EPA proposed to retain the existing standards in February 1984 (49 FR 6866, February 23, 1984). After considering public comments, the EPA published the final decision to retain these standards in June 1985 (50 FR 25532, June 19, 1985).

The EPA began a second review of the primary and secondary standards for oxides of nitrogen in 1987 (52 FR 27580, July 22, 1987). In November 1991, the EPA released an updated draft AQCD for CASAC and public review and comment (56 FR 59285, November 25, 1991). The CASAC reviewed the draft document at a meeting held on July 1, 1993, and concluded in a closure letter to the Administrator that the document provided ''an adequate basis'' for EPA's decision-making in the review (Wolff, 1993). The final AQCD was released later in 1993 (U.S. EPA, 1993). Based on the 1993 AQCD, the EPA's Office of Air Quality Planning and Standards (OAQPS) prepared a Staff Paper,[7] drafts of which were reviewed by the CASAC (Wolff, 1995; U.S. EPA, 1995a). In October 1995, the EPA proposed not to revise the secondary NO_2 NAAQS (60 FR 52874; October 11, 1995). After consideration of the comments received on the proposal, the Administrator finalized the decision not to revise the

[4] This section of the Act requires the Administrator to complete these reviews and make any revisions that may be appropriate ''at five-year intervals.''

[5] Since the late 1970s, each review of the air quality criteria and standards has generally involved the development of an Air Quality Criteria Document or ISA and a Staff Paper or staff Policy Assessment, which is often accompanied by or includes a quantitative exposure or risk assessment, prior to the regulatory decision-making phase.

[6] In reviews initiated prior to 2007, the AQCD provided the scientific foundation (*i.e.,* the air quality criteria) for the NAAQS. Since that time, the ISA has replaced the AQCD.

[7] Prior to reviews initiated in 2007, the Staff Paper summarized and integrated key studies and the scientific evidence, and from the 1990s onward, it also assessed potential exposures and associated risk. The Staff Paper also presented the EPA staff's considerations and conclusions regarding the adequacy of existing NAAQS and, when appropriate, the potential alternative standards that could be supported by the evidence and information. More recent reviews present this information in the Policy Assessment.

NO_2 NAAQS (61 FR 52852; October 8, 1996). The subsequent (and most recent) review of the N oxides secondary standard was a joint review with the secondary standard for SO_X, which was completed in 2012 (see subsection 4 below).

2. SO_X

The EPA first promulgated secondary NAAQS for sulfur oxides in April 1971 based on the scientific evidence evaluated in the 1969 AQCD (U.S. DHEW, 1969a [1969 AQCD]; 36 FR 8186, April 30, 1971). These standards, which were established on the basis of evidence of adverse effects on vegetation, included an annual arithmetic mean standard, set at 0.02 ppm SO_2,[8] and a 3-hour average standard set at 0.5 ppm SO_2, not to be exceeded more than once per year. In 1973, based on information indicating there to be insufficient data to support the finding of a study in the 1969 AQCD concerning vegetation injury associated with SO_2 exposure over the growing season, rather than from short-term peak concentrations, the EPA proposed to revoke the annual mean secondary standard (38 FR 11355, May 7, 1973). Based on consideration of public comments and external scientific review, the EPA released a revised chapter of the AQCD and published its final decision to revoke the annual mean secondary standard (U.S. EPA, 1973; 38 FR 25678, September 14, 1973). At that time, the EPA additionally noted that injury to vegetation was the only type of SO_2 welfare effect for which the evidence base supported a quantitative relationship, stating that although data were not available at that time to establish a quantitative relationship between SO_2 concentrations and other public welfare effects, including effects on materials, visibility, soils, and water, the SO_2 primary standards and the 3-hour secondary standard may to some extent mitigate such effects. The EPA also stated it was not clear that any such effects, if occurring below the current standards, were adverse to the public welfare (38 FR 25679, September 14, 1973).

In 1979, the EPA announced initiation of a concurrent review of the air quality criteria for oxides of sulfur and PM and plans for development of a combined AQCD for these pollutants (44 FR 56730, October 2, 1979). The EPA subsequently released three drafts of a combined AQCD for CASAC review and public comment. In these reviews, and in guidance provided at the August 20–22, 1980, public meeting of the CASAC on the first draft AQCD, the CASAC concluded that acidic deposition was a topic of extreme scientific complexity because of the difficulty in establishing firm quantitative relationships among emissions of relevant pollutants, formation of acidic wet and dry deposition products, and effects on terrestrial and aquatic ecosystems (53 FR 14935, April 26, 1988). The CASAC also noted that a fundamental problem of addressing acid deposition in a criteria document is that acid deposition is produced by several different criteria pollutants: oxides of sulfur, oxides of nitrogen, and the fine particulate fraction of suspended particles (U.S. EPA, 1982b, pp. 125–126). The CASAC also felt that any document on this subject should address both wet and dry deposition, since dry deposition was believed to account for a substantial portion of the total acid deposition problem (53 FR 14936, April 26, 1988; Lippman, 1987). For these reasons, CASAC recommended that, in addition to including a summary discussion of acid deposition in the final AQCD, a separate, comprehensive document on acid deposition be prepared prior to any consideration of using the NAAQS as a regulatory mechanism for the control of acid deposition.

Following CASAC closure on the AQCD for oxides of sulfur in December 1981, the EPA released a final AQCD (U.S. EPA, 1982b), and the EPA's OAQPS prepared a Staff Paper that was released in November 1982 (U.S. EPA, 1982c). The issue of acidic deposition was not, however, assessed directly in the OAQPS Staff Paper because the EPA followed the guidance given by the CASAC, subsequently preparing the following documents to address acid deposition: *The Acidic Deposition Phenomenon and Its Effects: Critical Assessment Review Papers, Volumes I and II* (U.S. EPA, 1984a, b) and *The Acidic Deposition Phenomenon and Its Effects: Critical Assessment Document* (U.S. EPA, 1985) (53 FR 14935–36, April 26, 1988). Although these documents were not considered criteria documents and had not undergone CASAC review, they represented the most comprehensive summary of scientific information relevant to acid deposition completed by the EPA at that point.

In April 1988, the EPA proposed not to revise the existing secondary standards for SO_2 (53 FR 14926, April 26, 1988). This proposed decision with regard to the secondary SO_2 NAAQS was due to the Administrator's conclusions that: (1) based upon the then-current scientific understanding of the acid deposition problem, it would be premature and unwise to prescribe any regulatory control program at that time; and (2) when the fundamental scientific uncertainties had been decreased through ongoing research efforts, the EPA would draft and support an appropriate set of control measures (53 FR 14926, April 26, 1988). This review of the secondary standard for SO_X was concluded in 1993, subsequent to the Clean Air Act Amendments of 1990 (see section I.C.3). The EPA decided not to revise the secondary standard, concluding that revisions to the standard to address acidic deposition and related SO_2 welfare effects were not appropriate at that time (58 FR 21351, April 21, 1993). In describing the decision, the EPA recognized the significant reductions in SO_2 emissions, ambient air SO_2 concentrations, and ultimately deposition expected to result from implementation of the title IV program, which was expected to significantly decrease the acidification of water bodies and damage to forest ecosystems and to permit much of the existing damage to be reversed with time (58 FR 21357, April 21, 1993). While recognizing that further action might be needed to address acidic deposition in the longer term, the EPA judged it prudent to await the results of the studies and research programs then underway, including those assessing the comparative merits of secondary standards, acidic deposition standards and other approaches to controlling acidic deposition and related effects, and then to determine whether additional control measures should be adopted or recommended to Congress (58 FR 21358, April 21, 1993).

3. Related Actions Addressing Acid Deposition

In 1980, Congress created the National Acid Precipitation Assessment Program (NAPAP). During the 10-year course of this program, the program issued a series of reports, including a final report in 1990 (NAPAP, 1991). On November 15, 1990, Amendments to the CAA were passed by Congress and signed into law by the President. In title IV of these Amendments, Congress included a statement of findings including the following:

> (1) the presence of acidic compounds and their precursors in the atmosphere and in deposition from the atmosphere represents a threat to natural resources, ecosystems, materials, visibility, and public health; . . . (3) the problem of acid deposition is of national and international significance; . . .

[8] Established with the annual standard as a guide to be used in assessing implementation plans to achieve the annual standard was a maximum 24-hour average concentration not to be exceeded more than once per year (36 FR 8187, April 30, 1971).

(5) current and future generations of Americans will be adversely affected by delaying measures to remedy the problem[.]

The goal of title IV was to reduce emissions of SO_2 by 10 million tons and N oxides emissions by 2 million tons from 1980 emission levels in order to achieve reductions over broad geographic regions/areas. In envisioning that further action might be necessary in the long term, Congress included section 404 of the 1990 Amendments. This section requires the EPA to conduct a study on the feasibility and effectiveness of an acid deposition standard or standards to protect ''sensitive and critically sensitive aquatic and terrestrial resources'' and at the conclusion of the study, submit a report to Congress. Five years later, the EPA submitted to Congress its report titled Acid Deposition Standard Feasibility Study: Report to Congress (U.S. EPA, 1995b) in fulfillment of this requirement. The Report to Congress concluded that establishing acid deposition standards for Sand N deposition might at some point in the future be technically feasible although appropriate deposition loads for these acidifying chemicals could not be defined with reasonable certainty at that time.

The 1990 Amendments also added new language to sections of the CAA pertaining to ecosystem effects of criteria pollutants, such as acid deposition. For example, a new section 108(g) was inserted, stating that ''[t]he Administrator may assess the risks to ecosystems from exposure to criteria air pollutants (as identified by the Administrator in the Administrator's sole discretion).'' The definition of welfare in CAA section 302(h) was expanded to indicate that welfare effects include those listed therein, ''whether caused by transformation, conversion, or combination with other air pollutants.'' Additionally, in response to legislative initiatives such as the 1990 Amendments, the EPA and other Federal agencies continued research on the causes and effects of acidic deposition and related welfare effects of SO_2 and implemented an enhanced monitoring program to track progress (58 FR 21357, April 21, 1993).

4. Most Recent Review of the Secondary Standards for N Oxides and SO_X

In December 2005, the EPA initiated a joint review [9] of the air quality criteria for oxides of nitrogen and sulfur and the secondary NAAQS for NO_2 and SO_2 (70 FR 73236, December 9, 2005).[10] The review focused on the evaluation of the protection provided by the secondary standards for oxides of nitrogen and oxides of sulfur for two general types of effects: (1) direct effects on vegetation of exposure to gaseous oxides of nitrogen and sulfur, which are the type of effects that the existing NO_2 and SO_2 secondary standards were developed to protect against, and (2) effects associated with the deposition of oxides of nitrogen and sulfur to sensitive aquatic and terrestrial ecosystems (77 FR 20218, April 3, 2012).

The Integrated Review Plan (IRP) for the review was released in December 2007, after review of a draft IRP by the public and CASAC (72 FR 57570, October 10, 2007; Russell, 2007; U.S. EPA, 2007). The first and second drafts of the ISA were released in December 2007 and August 2008, respectively, for the CASAC and public review (72 FR 72719, December 21, 2007; 73 FR 10243, February 26, 2008; Russell and Henderson, 2008; 73 FR 46908, August 12, 2008; 73 FR 53242, September 15, 2008; Russell and Samet, 2008a). The final ISA (referred to as 2008 ISA below) was released in December 2008 (73 FR 75716, December 12, 2008; U.S. EPA, 2008a). Based on the scientific information in the ISA, the EPA planned and developed a quantitative Risk and Exposure Assessment (REA),[11] two drafts of which were made available for public comment and reviewed by the CASAC (73 FR 10243, February 26, 2008; 73 FR 50965, August 29, 2008; Russell and Samet, 2008b; 73 FR 53242, September 15, 2008; 74 FR 28698, June 17, 2009; Russell and Samet, 2009). The final REA was released in September 2009 (U.S. EPA, 2009a; 74 FR 48543; September 23, 2009).

Drawing on the information in the final REA and ISA, the EPA OAQPS prepared a PA, two drafts of which were made available for public comment and review by the CASAC (75 FR 10479, March 8, 2010; 75 FR 11877, March 12, 2010; Russell and Samet, 2010b; 75 FR 57463, September 21, 2010; 75 FR 65480, October 25, 2010; Russell and Samet, 2010a). The final PA was released in January 2011 (U.S. EPA, 2011). Based on additional discussion subsequent to release of the final PA, the CASAC provided additional advice and recommendations on the multipollutant, deposition-based standard described in the 2011 PA (76 FR 4109, January 24, 2011; 76 FR 16768, March 25, 2011; Russell and Samet, 2011).

For the purpose of protection against the direct effects on vegetation of exposure to gaseous oxides of nitrogen and sulfur, the PA concluded that consideration should be given to retaining the current standards. With respect to the effects associated with the deposition of oxides of nitrogen and oxides of sulfur to sensitive aquatic and terrestrial ecosystems, the 2011 PA focused on the acidifying effects of nitrogen and sulfur deposition on sensitive aquatic ecosystems. Based on the information in the ISA, the assessments in the REA, and the CASAC advice, the 2011 PA concluded that consideration should be given to a new multipollutant standard intended to address deposition-related effects.

On August 1, 2011, the EPA published a proposed decision to retain the existing annual average NO_2 and 3-hour average SO_2 secondary standards, recognizing the protection they provided from direct effects on vegetation (76 FR 46084, August 1, 2011). Further, after considering the multipollutant approach to establishing secondary standards that was described in the 2011 PA, the Administrator proposed not to set such a new multipollutant secondary standard in light of a number of uncertainties. Additionally, the Administrator proposed to revise the secondary standards by adding secondary NO_2 and SO_2 standards identical to the 1-hour primary NO_2 and SO_2 standards, both set in 2010, noting that these new primary standards [12] would result in reductions in oxides of nitrogen and sulfur that would likely reduce nitrogen and sulfur deposition to sensitive

[9] Although the EPA has historically adopted separate secondary standards for oxides of nitrogen and oxides of sulfur, the EPA conducted a joint review of these standards because oxides of nitrogen and sulfur and their associated transformation products are linked from an atmospheric chemistry perspective, as well as from an environmental effects perspective. The joint review was also responsive to the National Research Council (NRC) recommendation for the EPA to consider multiple pollutants, as appropriate, in forming the scientific basis for the NAAQS (NRC, 2004).

[10] The review was conducted under a schedule specified by consent decree entered into by the EPA with the Center for Biological Diversity and four other plaintiffs. The schedule, which was revised on October 22, 2009, provided that the EPA sign notices of proposed and final rulemaking concerning its review of the oxides of nitrogen and oxides of sulfur NAAQS no later than July 12, 2011, and March 20, 2012, respectively.

[11] Although the REA for the 2012 review was presented in its own separate document, the REA for a NAAQS review may be presented in its own separate document or as one or more appendices in the PA (*e.g.,* U.S. EPA 2020b, 2020c, and PA for current review [U.S. EPA, 2024]).

[12] The 1-hour primary standards set in 2010 included the NO_2 standard of 100 ppb, as the 98th percentile of 1-hour daily maximum concentrations, averaged over three years, and the SO_2 standard of 75 ppb, as the 99th percentile of 1-hour daily maximum concentrations, averaged over three years (75 FR 6474, February 9, 2010; 75 FR 35520, June 22, 2010).

ecosystems (76 FR 46084, August 1, 2011). After consideration of public comments, the final decision in the review was to retain the existing standards to address the direct effects on vegetation of exposure to gaseous oxides of nitrogen and sulfur and to not set additional standards particular to effects associated with deposition of oxides of nitrogen and sulfur on sensitive aquatic and terrestrial ecosystems at that time (77 FR 20218, April 3, 2012).

The EPA's 2012 decision was challenged by the Center for Biological Diversity and other environmental groups. The petitioners argued that having decided that the existing standards were not adequate to protect against adverse public welfare effects such as damage to sensitive ecosystems, the Administrator was required to identify the requisite level of protection for the public welfare and to issue a NAAQS to achieve and maintain that level of protection. The District of Columbia Circuit (D.C. Circuit) disagreed, finding that the EPA acted appropriately in not setting a secondary standard given the EPA's conclusions that ''the available information was insufficient to permit a reasoned judgment about whether any proposed standard would be 'requisite to protect the public welfare . . .'.'' [13] In reaching this decision, the court noted that the EPA had ''explained in great detail'' the profound uncertainties associated with setting a secondary NAAQS to protect against aquatic acidification.[14]

5. PM

The EPA first established a secondary standard for PM in 1971 (36 FR 8186, April 30, 1971), based on the original AQCD, which described the evidence as to effects of PM on visibility, materials, light absorption, and vegetation (U.S. DHEW, 1969b). To provide protection generally from visibility effects and materials damage, the secondary standard was set at 150 μg/m^3, as a 24-hour average, from total suspended particles (TSP), not to be exceeded more than once per year (36 FR 8187; April 30, 1971).[15]

In October 1979, the EPA announced the first periodic review of the air quality criteria and NAAQS for PM (44 FR 56730, October 2, 1979). As summarized in subsection 2 above, the EPA developed a new AQCD for PM and SO_X, drafts of which were reviewed by the CASAC (U.S. EPA, 1982b). Subsequently, the EPA OAQPS developed a Staff Paper (U.S. EPA, 1982d), two drafts of which were reviewed by the CASAC (Friedlander, 1982). Further, the EPA OAQPS prepared an Addendum to the 1982 Staff Paper, which also received CASAC review (Lippman, 1986; U.S. EPA, 1986). After consideration of public comments on a proposed decision, the final decision in that review revised the indicator for PM NAAQS from TSP to particulate matter with mass median diameter of 10 microns (PM_{10}) (49 FR 10408, March 20, 1984; 52 FR 24634, July 1, 1987). With an indicator of PM_{10}, two secondary standards were established to be the same as the primary standards. A 24-hour secondary standard was set at 150 μg/m^3, with the form of one expected exceedance per year, on average over three years. Additionally, an annual secondary standard was set at 50 μg/m^3, with a form of annual arithmetic mean, averaged over three years (52 FR 24634, July 1, 1987).

In April 1994, the EPA initiated the second periodic review of the air quality criteria and NAAQS for PM. In developing the AQCD, the Agency made available three external review drafts for public and CASAC review; the final AQCD was released in 1996 (U.S. EPA, 1996). The EPA's OAQPS prepared a Staff Paper that was released in November 1997, after CASAC and public review of two drafts (U.S. EPA, 1996; Wolff, 1996). Revisions to the PM standards were proposed in 1996, and in 1997 the EPA promulgated final revisions (61 FR 65738; December 13, 1996; 62 FR 38652, July 18, 1997). With the 1997 decision, the EPA added new standards, using $PM_{2.5}$ as the indicator for fine particles. The new secondary standards were set equal to the primary standards, in all respects, as follows: (1) an annual standard with a level of 15.0 μg/m^3, based on the 3-year average of annual arithmetic mean $PM_{2.5}$ concentrations from single or multiple community-oriented monitors; [16] and (2) a 24-hour standard with a level of 65 μg/m^3, based on the 3-year average of the 98th percentile of 24-hour $PM_{2.5}$ concentrations at each monitor within an area. Further, the EPA retained the annual PM_{10} standard, without revision, and revised the form of the 24-hour PM_{10} standard to be based on the 99th percentile of 24-hour PM_{10} concentrations at each monitor in an area.

Following promulgation of the 1997 p.m. NAAQS, several parties filed petitions for review, raising a broad range of issues. In May 1999, the U.S. Court of Appeals for the D.C. Circuit upheld the EPA's decision to establish fine particle standards, (*American Trucking Ass'ns, Inc.* v. *EPA,* 175 F. 3d 1027, 1055–56 [D.C. Cir. 1999]). The D.C. Circuit also found ''ample support'' for the EPA's decision to regulate coarse particle pollution, but vacated the 1997 PM_{10} standards, concluding that the EPA had not provided a reasonable explanation justifying use of PM_{10} as an indicator for coarse particles (*Id* at 1054–55). Pursuant to the D.C. Circuit's decision, the EPA removed the vacated 1997 PM_{10} standards, leaving the pre-existing 1987 PM_{10} standards in place (65 FR 80776, December 22, 2000). The D.C. Circuit also upheld the EPA's determination not to establish more stringent secondary standards for fine particles to address effects on visibility (*Id* at 1027). The D.C. Circuit also addressed more general issues related to the NAAQS, including issues related to the consideration of costs in setting NAAQS and the EPA's approach to establishing the levels of NAAQS.

In October 1997, the EPA initiated the third periodic review of the air quality criteria and NAAQS for PM (62 FR 55201, October 23, 1997). After the CASAC and public review of several drafts of the AQCD, the EPA released the final AQCD in October 2004 (U.S. EPA, 2004a, b). The EPA's OAQPS finalized the Staff Paper in December 2005 (U.S. EPA, 2005). On December 20, 2005, the EPA announced its proposed decision to revise the NAAQS for PM and solicited public comment on a broad range of options (71 FR 2620, January 17, 2006). On September 21, 2006, the EPA announced its final decisions to revise the PM NAAQS to provide increased protection of public health and welfare (71 FR 61144, October 17, 2006). Revisions to the secondary standards were identical to those for the primary standards, with the decision describing the protection provided specifically for visibility and non-visibility related welfare effects (71 FR 61203–61210, October 17, 2006). With regard to the standards for fine particles, the EPA revised the level of

[13] *Center for Biological Diversity, et al.* v. *EPA,* 749 F.3d 1079, 1087 (2014).

[14] *Id.* at 1088.

[15] Additionally, a guide to be used in assessing implementation plans to achieve the 24-hour standard was set at 60 μg/m^3, as an annual geometric mean (36 FR 8187; April 30, 1971).

[16] The 1997 annual $PM_{2.5}$ standard was compared with measurements made at the community-oriented monitoring site recording the highest concentration or, if specific constraints were met, measurements from multiple community-oriented monitoring sites could be averaged (*i.e.,* ''spatial averaging''). In the last review (completed in 2012) the EPA replaced the term ''community-oriented'' monitor with the term ''area-wide'' monitor. Area-wide monitors are those sited at the neighborhood scale or larger, as well as those monitors sited at micro- or middle-scales that are representative of many such locations in the same core-based statistical area (CBSA) (78 FR 3236, January 15, 2013).

the 24-hour $PM_{2.5}$ standards to 35 μg/m^3, retained the level of the annual $PM_{2.5}$ standards at 15.0 μg/m^3, and revised the form of the annual $PM_{2.5}$ standards by narrowing the constraints on the optional use of spatial averaging. With regard to the standards for PM_{10}, the EPA retained the 24-hour standards, with levels at 150 μg/m^3, and revoked the annual standards.

Several parties filed petitions for review of the EPA's 2006 p.m. NAAQS decision. One of these petitions raised the issue of setting the secondary $PM_{2.5}$ standards identical to the primary standards. On February 24, 2009, the D.C. Circuit issued its opinion in *American Farm Bureau Federation* v. *EPA,* 559 F. 3d 512 (D.C. Cir. 2009) and remanded the standards to the EPA because the Agency failed to adequately explain why setting the secondary PM standards identical to the primary standards provided the required protection for public welfare, including protection from visibility impairment (*Id.* at 528–32). The EPA responded to the court's remands as part of the subsequent review of the PM NAAQS, which was initiated in 2007.

In June 2007, the EPA initiated the fourth periodic review of the air quality criteria and the PM NAAQS (72 FR 35462, June 28, 2007). Based on the NAAQS review process, as revised in 2008 and again in 2009, the EPA held science/policy issue workshops on the primary and secondary PM NAAQS (72 FR 34003, June 20, 2007; 72 FR 34005, June 20, 2007), and prepared and released the planning and assessment documents that are part of the review process (*i.e.,* IRP [U.S. EPA, 2008b], ISA [U.S. EPA, 2009b], REA planning document for welfare [U.S. EPA, 2009c], and an urban-focused visibility assessment [U.S. EPA, 2010], and PA [U.S. EPA, 2011]). In June 2012, the EPA announced its proposed decision to revise the NAAQS for PM (77 FR 38890, June 29, 2012). In December 2012, the EPA announced its final decisions to revise the primary and secondary $PM_{2.5}$ annual standards (78 FR 3086, January 15, 2013). With regard to the secondary standards, the EPA retained the 24-hour $PM_{2.5}$ and PM_{10} standards, with a revision to the form of the 24-hour $PM_{2.5}$, to eliminate the option for spatial averaging (78 FR 3086, January 15, 2013). Petitioners challenged the EPA's final rule. On judicial review, the revised standards and monitoring requirements were upheld in all respects (*National Association of Manufacturers* v. *EPA,* 750 F.3d 921, [D.C. Cir. 2014]).

The subsequent review of the PM secondary standards, completed in 2020, and its subsequent reconsideration, focused on consideration of protection provided from visibility effects, materials damage, and climate effects (85 FR 82684, December 18, 2020; 89 FR 16202, March 6, 2024). Those effects—visibility effects, materials damage and climate effects—are not addressed in this review. The evidence for ecological effects of PM is addressed in the review of the air quality criteria and standards described in the PA for this review.

D. Current Review

In August 2013, the EPA issued a call for information in the **Federal Register** for information related to the newly initiated review of the air quality criteria for oxides of sulfur and oxides of nitrogen and announced a public workshop to discuss policy-relevant scientific information to inform the review (78 FR 53452, August 29, 2013). Based in part on the information received in response to the call for information, the EPA developed a draft IRP, which was made available for consultation with the CASAC and for public comment (80 FR 69220, November 9, 2015). Comments from the CASAC and the public on the draft IRP were considered in preparing the final IRP (Diez Roux and Fernandez, 2016; U.S. EPA, 2017). In developing the final IRP, the EPA expanded the review to also include review of the criteria and standards related to ecological effects of PM in recognition of linkages between these pollutants (oxides of nitrogen, oxides of sulfur and PM) with respect to atmospheric transformation of N and S oxides into particulate compounds, deposition of N and S compounds and associated ecological effects (U.S. EPA, 2017). Addressing the pollutants together enables a comprehensive consideration of the nature and interactions of the pollutants, which is important for ensuring thorough evaluation of the scientific information relevant to ecological effects of N and S deposition.

In March 2017, the EPA released the first external review draft of the *Integrated Science Assessment (ISA) for Oxides of Nitrogen, Oxides of Sulfur, and Particulate Matter Ecological Criteria* (82 FR 15702, March 30, 2017), which was then reviewed by the CASAC at a public meeting on May 24–25, 2017 (82 FR 15701, March 30, 2017) and August 31, 2017 (82 FR 35200, July 28, 2017; Diez Roux and Fernandez, 2017). With consideration of comments from the CASAC and the public, the EPA released a second external review draft (83 FR 29786, June 26, 2018), which the CASAC reviewed at public meetings on September 5–6, 2018 (83 FR 2018; July 9, 2018) and April 27, 2020 (85 FR 16093, March 30, 2020; Cox, Kendall, and Fernandez, 2020a).[17] The EPA released the final ISA in October 2020 (85 FR 66327, October 19, 2020; U.S. EPA, 2020a). In planning for quantitative aquatic acidification exposure/risk analyses for consideration in the PA, the EPA solicited public comment and consulted with the CASAC (83 FR 31755, July 9, 2018; Cox, Kendall, and Fernandez, 2020b; U.S. EPA, 2018; 83 FR 42497, August 22, 2018).

The draft PA, including the REA for aquatic acidification as an appendix, was completed in May 2023 and was made available for review by the CASAC and for public comment (88 FR 34852, May 31, 2023). The CASAC review was conducted at public meetings held on June 28–29, 2023 (88 FR 17572, March 23, 2023), and September 5–6, 2023 (88 FR 45414, July 17, 2023). The CASAC conveyed advice on the standards and comments on the draft PA in its September 27, 2023, letter to the Administrator (Sheppard, 2023). The final PA was completed in January 2024 (89 FR 2223, January 12, 2024).

Materials upon which this proposed decision is based, including the documents described above, are available to the public in the docket for this review.[18] The timeline for the remainder of this review is governed by a consent decree that requires the EPA to sign a notice of proposed decision by April 9, 2024, and a final decision notice by December 10, 2024 (*Center for Biological Diversity* v. *Regan* [No. 4:22–cv–02285–HSG (N.D. Cal.]).

II. Rationale for Proposed Decisions

This section presents the rationale for the Administrator's proposed decisions in the review of the secondary standards for the ecological effects of SO_X, N oxides and PM. This rationale is based on a thorough review of the full evidence base, including the scientific information available since the last review of the secondary standards for N oxides and SO_X, which is generally published between January 2008 and May 2017 (and considered in the ISA), as well as more recent studies identified during peer review or by public

[17] A change in CASAC membership contributed to an extended time period between the two public meetings.

[18] The docket for this review, EPA–HQ–OAR–2014–0128, has incorporated the ISA docket (EPA–HQ–ORD–2013–0620) by reference. Both are publicly accessible at *www.regulations.gov.*

comments (ISA, section IS.1.2),[19] integrated with the information and conclusions from previous assessments and presented in the ISA, on ecological effects associated with SO_X, N oxides and PM and pertaining to their presence in ambient air. The Administrator's rationale also takes into account: (1) the PA evaluation of the policy-relevant information in the ISA and presentation of quantitative analyses of air quality, exposure and aquatic acidification risks; (2) CASAC advice and recommendations, as reflected in discussions of drafts of the ISA and PA at public meetings and in the CASAC's letters to the Administrator; and (3) public comments received during the development of these documents.

In presenting the rationale for the Administrator's proposed decisions and their foundations, section II.A provides background on the general approach in this review, including a summary of the basis for the existing standards (section II.A.1), a summary of the prior review of the SO_X and N oxides standards for deposition-related effects (section II.A.2) and the general approach for the current review (section II.A.3).

Section II.B summarizes air quality information and analyses relating S and N deposition to concentrations of SO_X, N oxides and PM. Section II.C summarizes the currently available ecological effects evidence as summarized in the ISA, focusing on consideration of key policy-relevant aspects. Section II.D summarizes the exposure and risk information for this review, drawing on the quantitative analyses of aquatic acidification risk, presented in the PA. Section II.E presents the Administrator's proposed conclusions on the current standards and potential alternatives (section II.E.3), drawing on both evidence-based and exposure/risk-based considerations from the PA (section II.E.1) and advice from the CASAC (section II.E.2).

[19] In addition to the review's opening ''Call for Information'' (78 FR 53452, August 29, 2013), multiple search methodologies were applied to identify relevant scientific findings that have emerged since the 2008 ISA. Search techniques for the current ISA identified and evaluated studies and reports that have undergone scientific peer review and were published or accepted for publication between January 2008 (providing some overlap with the cutoff date for the last ISA) and May 2017. Studies published after the literature cutoff date for this ISA were also considered if they were submitted in response to the Call for Information or identified in subsequent phases of ISA development, particularly to the extent that they provide new information that affects key scientific conclusions. References that are cited in the ISA, the references that were considered for inclusion but not cited, and electronic links to bibliographic information and abstracts can be found at: *https://hero.epa.gov/hero/index.cfm/project/page/project_id/2965* (ISA, section IS.1.2).

A. Introduction

As is the case for all such reviews, this review is based, most fundamentally, on using the Agency's assessments of the current scientific evidence and associated quantitative analyses to inform the Administrator's judgment regarding secondary standards for SO_X, N oxides and PM that are requisite to protect the public welfare from known or anticipated adverse effects associated with that pollutant's presence in the ambient air. The EPA's assessments are primarily documented in the ISA and PA, both of which have received CASAC review and public comment (82 FR 15702, March 30, 2017; 82 FR 15701, March 30, 2018; 83 FR 29786; June 26, 2018; 83 FR 31755, July 9, 2018; 85 FR 16093; March 20, 2020; 88 FR 34852, May 31, 2023; 88 FR 17572, March 23, 2023; 88 FR 45414, July 17, 2023). In bridging the gap between the scientific assessments of the ISA and the judgments required of the Administrator in his decisions on the current standard, the PA evaluates policy implications of the assessment of the current evidence in the ISA and the quantitative exposure and risk analyses and information documented in the PA. In evaluating the public welfare protection afforded by the current standard, the four basic elements of the NAAQS (indicator, averaging time, level, and form) are considered collectively.[20]

The Agency's approach in its review of secondary standards is consistent with the requirements of the provisions of the CAA related to the review of NAAQS and with how the EPA and the courts have historically interpreted the CAA. These provisions require the Administrator to establish secondary standards that, in the Administrator's judgment, are requisite (*i.e.,* neither more nor less stringent than necessary) to protect the public welfare from known or anticipated adverse effects associated with the presence of the pollutant in the ambient air. In so doing, the Administrator considers advice from the CASAC and public comment. This approach is based on a recognition that the available welfare effects evidence generally reflects a range of effects that include ambient air exposure circumstances for which scientists generally agree that effects are likely to occur as well as lower levels at which the likelihood and magnitude of response become increasingly uncertain. The CAA does not require that standards be set at a zero-risk level, but rather at a level that reduces risk sufficiently so as to protect the public welfare from known or anticipated adverse effects.

The Agency's decisions on the adequacy of the current secondary standards and, as appropriate, on any potential alternative standards considered in a review, are largely public welfare policy judgments made by the Administrator based on the Administrator's informed assessment of what constitutes requisite protection against adverse effects to public welfare. A public welfare policy decision draws upon scientific information and analyses about welfare effects, exposure and risks, as well as judgments about the appropriate response to the range of uncertainties that are inherent in the scientific evidence and analyses. The ultimate determination as to what level of damage to ecosystems and the services provided by those ecosystems is adverse to public welfare is not wholly a scientific question, although it is informed by scientific studies linking ecosystem damage to losses in ecosystem services and information on the value of those losses of ecosystem services. In reaching such decisions, the Administrator seeks to establish standards that are neither more nor less stringent than necessary for this purpose.

Thus, in general, conclusions reached by the Administrator in secondary NAAQS reviews on the amount of public welfare protection from the presence of the pollutant(s) in ambient air that is appropriate to be afforded by a secondary standard take into account a number of considerations. Among these considerations are the nature and degree of effects of the pollutant, including the Administrator's judgments on what constitutes an adverse effect to the public welfare as well as the strengths and limitations of the available and relevant information, with its associated uncertainties. Across reviews, it is generally recognized that such judgments should neither overstate nor understate the strengths and limitations of the evidence and information nor the appropriate inferences to be drawn as to risks to public welfare, and that the choice of

[20] The indicator defines the chemical species or mixture to be measured in the ambient air for the purpose of determining whether an area attains the standard. The averaging time defines the period over which air quality measurements are to be averaged or otherwise analyzed. The form of a standard defines the air quality statistic that is to be compared to the level of the standard in determining whether an area attains the standard. For example, the form of the annual NAAQS for fine particulate matter ($PM_{2.5}$) is the average of annual mean concentrations for three consecutive years, while the form of the 3-hour secondary NAAQS for SO_2 is the second highest 3-hour average in a year. The level of the standard defines the air quality concentration used for that purpose.

the appropriate level of protection is a public welfare policy judgment entrusted to the Administrator under the CAA taking into account both the available evidence and the uncertainties (80 FR 65404–05, October 26, 2015). Thus, the Administrator's final decisions in such reviews draw upon the scientific information and analyses about welfare effects, environmental exposures and risks, and associated public welfare significance, as well as judgments about how to consider the range and magnitude of uncertainties that are inherent in the scientific evidence and quantitative analyses.

1. Basis for Existing Secondary Standards

In the last review of the secondary standards for SO_X and N oxides, completed in 2012, the EPA retained the existing 3-hour SO_2 standard, with its level of 0.5 ppm, and the annual NO_2 standard, with its level of 0.053 ppm (77 FR 20218, April 3, 2012). Both of these secondary standards were established in 1971 (36 FR 8186, April 30, 1971). The basis for both the existing SO_2 and NO_2 secondary standard is to provide protection to the public welfare related to direct effects on vegetation (U.S. DHEW, 1969a; U.S. EPA, 1971).

The welfare effects evidence for SO_X in previous reviews indicates a relationship between short- and long-term SO_2 exposures and foliar damage to cultivated plants, reductions in productivity, species richness, and diversity (U.S. DHEW, 1969a; U.S. EPA, 1982c; U.S. EPA, 2008). At the time the standard was set, concentrations of SO_2 in the ambient air were also associated with other welfare effects, including effects on materials and visibility related to sulfate, a particulate transformation product of SO_2 (U.S. DHEW, 1969a). However, the available data were not sufficient to establish a quantitative relationship between specific SO_2 concentrations and such effects (38 FR 25679, September 14, 1973). Accordingly, direct effects of SO_X in ambient air on vegetation is the basis for the existing secondary standard for SO_X. Effects on materials and visibility (which relate to particles in air, including sulfates) have more recently been considered in the PM secondary NAAQS reviews (*e.g.,* 85 FR 82684, December 18, 2020).

The welfare effects evidence for N oxides in previous reviews includes foliar injury, leaf drop, and reduced yield of some crops (U.S. EPA, 1971; U.S. EPA, 1982c; U.S. EPA, 1993; U.S. EPA, 2008a). Since it was established in 1971, the secondary standard for N oxides has been reviewed three times, in 1985, 1996, and 2012 (50 FR 25532, June 19, 1985; 61 FR 52852; October 8, 1996; 77 FR 20218, April 3, 2012). Although those reviews identified additional effects related to N deposition, they all have concluded that the existing NO_2 secondary standard provided adequate protection related to the ''direct'' effects of airborne N oxides on vegetation on which the standard is based).

In the last review of the secondary PM standards with regard to protection from ecological effects, completed in 2013, the EPA retained the 24-hour $PM_{2.5}$ standard, with its level of 35 $\mu g/m^3$, and the 24-hour PM_{10} standard, with its level of 150 $\mu g/m^3$ (78 FR 3228, January 15, 2013). With regard to the annual $PM_{2.5}$ standard, the EPA retained the averaging time and level, set at 15 $\mu g/m^3$, while revising the form to remove the option for spatial averaging consistent with this change to the primary annual $PM_{2.5}$ standard (78 FR 3225, January 15, 2013). The 2013 review considered the PM standards with regard to protection for an array of effects that include effects on visibility, materials damage, and climate effects, as well as ecological effects, and the EPA concluded that those standards provided protection for ecological effects (*e.g.,* 78 FR 3225–3226, 3228, January 15, 2013). In reaching this conclusion, it was noted that the PA for the review explicitly excluded discussion of the effects associated with deposited PM components of N oxides and SO_X and their transformation products, which were being addressed in the joint review of the secondary NO_2 and SO_2 NAAQS (78 FR 3202, January 15, 2013). The ecological effects of PM considered include direct effects on plant foliage as well as effects of the ecosystem loading of PM constituents such as metals or organic compounds (2009 ISA, section 2.5.3). For all of these effects, the 2013 decision recognized an absence of information that would support any different standards and concluded the existing standards, with the revision to the form of the annual $PM_{2.5}$ standard, provided the requisite protection (78 FR 3086, January 15, 2013).

2. Prior Review of Deposition-Related Effects

In the 2012 review of the NO_2 and SO_2 secondary standards, the EPA recognized that a significant increase in understanding of the effects of N oxides and SO_X had occurred since the prior secondary standards reviews for those pollutants (77 FR 20236, April 3, 2012). Considering the extensive evidence available at that time, the Agency concluded that the most significant risks of adverse effects of N oxides and SO_X to public welfare were those related to deposition of N and S compounds to both terrestrial and aquatic ecosystems (77 FR 20236, April 3, 2012). Accordingly, in addition to evaluating the protection provided by the secondary standards for N oxides and SO_X from effects associated with the airborne pollutants, the 2012 review also included extensive analyses of the welfare effects associated with nitrogen and sulfur deposition to sensitive aquatic and terrestrial ecosystems (77 FR 20218, April 3, 2012).

Based on the available evidence, the risks of atmospheric deposition analyzed in the 2009 REA related to two categories of ecosystem effects: acidification and nutrient enrichment (U.S. EPA, 2009a). The analyses included assessment of risks of both types of effects in both terrestrial and aquatic ecosystems. While the available evidence supported conclusions regarding the role of atmospheric deposition of S and N compounds in acidification and nutrient enrichment of aquatic and terrestrial ecosystems, there was variation in the strength of the evidence and of the information supporting multiple quantitative linkages between pollutants in ambient air and ecosystem responses and potential public welfare implications.

While there is extensive evidence of deleterious effects of excessive nitrogen loadings to terrestrial and aquatic ecosystems, consideration of the nutrient enrichment-related effects of atmospheric N and S deposition with regard to identification of options to provide protection for deposition-related effects was limited by several factors. For example, the co-stressors affecting forests, including other air pollutants such as ozone, and limiting factors such as moisture and other nutrients, confound the assessment of marginal changes in any one stressor or nutrient in a forest ecosystem, limiting the information on the effects of changes in N deposition on forestlands and other terrestrial ecosystems (2011 PA, section 6.3.2). Further, only a fraction of the deposited N was reported to be taken up by the forests, with most of the N retained in the soils, such that forest management practices can significantly affect the nitrogen cycling within a forest ecosystem (2008 ISA section 3.3.2.1 and Annex C, section C.6.3). Factors affecting consideration of aquatic eutrophication effects included the appreciable contributions of non-atmospheric sources to waterbody nutrient loading, which affected our attribution of specific effects to

atmospheric sources of N, and limitations in the ability of the available data and models to characterize incremental adverse impacts of atmospheric N deposition (2011 PA, section 6.3.2).

The linkages between terrestrial acidification and atmospheric deposition of N and S compounds were also limited by the sparseness of available data for identifying appropriate assessment levels for terrestrial acidification indicators and uncertainties with regard to empirical case studies in the ISA (*e.g.,* the potential for other stressors to confound relationships between deposition and terrestrial acidification effects). However, the evidence in the 2008 ISA and the REA analyses of aquatic acidification provided strong support to the evidence for a relationship between atmospheric deposition of N and S compounds and loss of acid neutralizing capacity (ANC) in sensitive ecosystems, with associated aquatic acidification effects.

In light of the evidence and findings of these analyses and advice from the CASAC, the PA concluded it was appropriate to place greatest confidence in findings related to the aquatic acidification-related effects of N oxides and SO_X relative to other deposition-related effects. Therefore, the PA focused on aquatic acidification effects from deposition of N and S compounds in identifying policy options for providing public welfare protection from deposition-related effects of N oxides and SO_X, concluding that the available information and assessments were only sufficient at that time to support development of a standard to address aquatic acidification. Consistent with this, the PA concluded it was appropriate to consider a secondary standard in the form of an aquatic acidification index (AAI) and identified a range of AAI values (which correspond to minimum ANC levels) for consideration (2011 PA, section 7.6.2). Conceptually, the AAI is an index that uses the results of ecosystem and air quality modeling to estimate waterbody ANC. The standard level for an AAI-based standard was conceptually envisioned to be a national minimum target ANC for waterbodies in the ecoregions of the U.S. for which data were considered adequate for these purposes (2011 PA, section 7.6.2).

While the NAAQS have historically been set in terms of an ambient air concentration, an AAI-based standard was envisioned to have a single value established for the AAI, but the concentrations of SO_X and N oxides would be specific to each ecoregion, taking into account variation in several factors that influence waterbody ANC, and consequently could vary across the U.S. The factors, specific to each ecoregion (''F factors''), which it was envisioned would be established as part of the standard, include: surface water runoff rates and so-called ''transference ratios,'' which are factors applied to back-calculate or estimate the concentrations of SO_X and N oxides corresponding to target deposition values that would meet the AAI-based standard level, which is also the target minimum ANC (2011 PA, Chapter 7).[21] The ecoregion-specific values for these factors would be specified based on then available data and simulations of the Community Multiscale Air Quality (CMAQ) model, and codified as part of such a standard. As part of the standard, these factors would be reviewed in the context of each periodic review of the NAAQS.

After consideration of the PA conclusions, the Administrator concluded that while the conceptual basis for the AAI was supported by the available scientific information, there were limitations in the available relevant data and uncertainties associated with specifying the elements of the AAI, specifically those based on modeled factors, that posed obstacles to establishing such a standard under the CAA. It was recognized that the general structure of an AAI-based standard addressed the potential for contributions to acid deposition from both N oxides and SO_X and quantitatively described linkages between ambient air concentrations, deposition, and aquatic acidification, considering variations in factors affecting these linkages across the country. However, the Administrator judged that the limitations and uncertainties in the available information were too great to support establishment of a new standard that could be concluded to provide the requisite protection for such effects under the Act (77 FR 20218, April 3, 2012). These uncertainties generally related to the quantification of the various elements of the standard (the ''F factors''), and their representativeness at an ecoregion scale. These uncertainties and the complexities in this approach were recognized to be unique to the 2012 review of the NAAQS for N and S oxides and were concluded to preclude the characterization and degree of protectiveness that would be afforded by an AAI-based standard, within the ranges of levels and forms identified in the PA, and the representativeness of F factors in the AAI equation described in the 2011 PA (77 FR 20261, April 3, 2012).

> . . . the Administrator recognizes that characterization of the uncertainties in the AAI equation as a whole represents a unique challenge in this review primarily as a result of the complexity in the structure of an AAI based standard. In this case, the very nature of some of the uncertainties is fundamentally different than uncertainties that have been relevant in other NAAQS reviews. She notes, for example, some of the uncertainties uniquely associated with the quantification of various elements of the AAI result from limitations in the extent to which ecological and atmospheric models, which have not been used to define other NAAQS, have been evaluated. Another important type of uncertainty relates to limitations in the extent to which the representativeness of various factors can be determined at an ecoregion scale, which has not been a consideration in other NAAQS.'' [77 FR 20261, April 3, 2012]

The Administrator concluded that while the existing secondary standards were not adequate to provide protection against potentially adverse deposition-related effects associated with N oxides and SO_X, it was not appropriate under section 109 to set any new or additional standards at that time to address effects associated with deposition of N and S compounds on sensitive aquatic and terrestrial ecosystems (77 FR 20262–20263, April 3, 2012).

3. General Approach for This Review

As is the case for all NAAQS reviews, this secondary standards review uses the Agency's assessment of the current scientific evidence and associated quantitative analyses as a foundation to inform the Administrator's judgments regarding secondary standards that are requisite to protect the public welfare from known or anticipated adverse effects. The approach for this review of the secondary SO_X, N oxides, and PM standards builds on the last reviews of those pollutants, including the substantial assessments and evaluations performed over the course of those reviews, and considering the more recent scientific information and air quality data now available to inform understanding of the key policy-relevant issues in the current review.

[21] These were among the ecoregion-specific factors that comprised the parameters F1 through F4 in the AAI equation (2011 PA, p. 7–37). The parameter F2 represented the ecoregion-specific estimate of acidifying deposition associated with reduced forms of nitrogen, NH_X (2011 PA, p. 7–28 and ES–8 to ES–9). The 2011 PA suggested that this factor could be specified based on a 2005 CMAQ model simulation over 12-km grid cells or monitoring might involve the use of monitoring data for NH_X applied in dry deposition modeling. It was recognized that appreciable spatial variability, as well as overall uncertainty, were associated with this factor.

This review of the secondary standards for SO_X, N oxides, and PM assesses the protection provided by the standards from two categories of effects: direct effects of the airborne pollutants and indirect effects of the associated S- and N-containing compounds (in gaseous and particulate form) deposited in ecosystems. In so doing, the review draws on the currently available evidence as assessed in the ISA (and prior assessments) and quantitative exposure, risk, and air quality information in the PA, including the REA for aquatic acidification.

With regard to direct effects, we draw on the currently available evidence as assessed in the ISA, including the determinations regarding the causal nature of relationships between the airborne pollutants and ecological effects, which focus most prominently on vegetation, and quantitative exposure and air quality information. Based on this information, we consider the policy implications, most specifically whether the evidence supports the retention or revision of the current NO_2 and SO_2 secondary standards. With regard to the effects of PM, we take a similar approach, based on the evidence presented in the current ISA and conclusions from the review of the PM NAAQS concluded in 2013 (in which ecological effects were last considered) to assess the effectiveness of the current PM standard to protect against these types of impacts.

With regard to deposition-related effects, we consider the evidence for the array of effects identified in the ISA (and summarized in section II.B below), including both terrestrial and aquatic effects; and the limitations in the evidence and associated uncertainties; as well as the public welfare implications of such effects. The overall approach takes into account the nature of the welfare effects and the exposure conditions associated with effects in identifying S and N deposition levels appropriate to consider in the context of public welfare protection. To identify and evaluate metrics relevant to air quality standards (and their elements), we have assessed relationships developed from air quality measurements near pollutant sources and deposition estimates nearby and in downwind ecoregions. In so doing, the available quantitative information both on deposition and effects, and on ambient air concentrations and deposition, has been assessed with regard to the existence of linkages between SO_X, N oxides, and PM in ambient air and deposition-related effects. These assessments then inform judgments on the likelihood of occurrence of deposition-related effects under air quality that meets the existing standards for these pollutants, or potential alternatives.

In considering the information on deposition and effects, we recognize that the impacts from the dramatically higher deposition rates of the past century can affect how ecosystems and biota respond to more recent, lower deposition rates, complicating interpretation of impacts related to more recent, lower deposition levels. This complexity is illustrated by findings of studies that compared soil chemistry across 15–30-year intervals (1984–2001 and 1967–1997) and reported that although atmospheric deposition in the Northeast declined across those intervals, soil acidity increased (ISA, Appendix 4, section 4.6.1). As noted in the ISA, ''[i]n areas where N and S deposition has decreased, chemical recovery must first create physical and chemical conditions favorable for growth, survival, and reproduction'' (ISA, Appendix 4, section 4.6.1). Thus, the extent to which S and N compounds (once deposited) are retained in soil matrices (with potential effects on soil chemistry) influences the dynamics of the response of the various environmental pathways to changes in air quality, in addition to the influences of emissions, ambient air concentrations and associated deposition.

The two-pronged approach to this review's consideration of deposition-related effects based on the available information in the ISA (summarized in section II.C and II.D below) includes the consideration of deposition levels that may be associated with ecological effects of potential concern. In this step, we consider and strive to focus on effects for which the evidence is most robust with regard to established quantitative relationships between deposition and ecosystem effects. The information for terrestrial ecosystems is derived primarily from analysis of the evidence presented in the ISA. For aquatic ecosystems, primary focus is given to effects related to aquatic acidification, for which we have conducted quantitative risk and exposure analyses based on available modeling applications that relate acid deposition and acid buffering capability in U.S. waterbodies, as summarized in section II.D below (PA, section 5.1 and Appendix 5A).

In parallel fashion to identification of deposition levels for consideration, air quality and deposition analyses have been employed to inform an understanding of relationships between ambient air concentrations near pollutant sources in terms of metrics relevant to air quality standards (and their elements) and ecosystem deposition estimates. As described in section II.B below, several different types of analyses have been performed in this review for this purpose. Interpretation of findings from these analyses, in combination with the identified deposition levels of interest, and related policy judgments regarding limitations and associated uncertainties of the underlying information, inform the Administrator's proposed conclusions on the extent to which existing standards, or potential alternative standards, might be expected to provide protection from these levels.

In summary, our approach to evaluating the standards with regard to protection from ecological effects related to ecosystem deposition of N and S compounds (presented in the sections that follow) involves multiple components: (1) review of the scientific evidence to identify the ecological effects associated with the three pollutants, both those related to direct pollutant contact and to ecosystem deposition; (2) assessment of the evidence and characterization of the REA results to identify deposition levels related to categories of ecosystem effects; (3) analysis of relationships between ambient air concentrations of the three pollutants and deposition of N and S compounds to understand key aspects of these relationships that can inform the Administrator's decisions on policy options for ambient air standards to protect against air concentrations associated with direct effects and with deposition-related effects that are judged adverse to the public welfare. As is described in sections II.B and II.E, for two of the pollutants, N oxides and PM, relating ambient air concentrations to deposition (of N compounds) is particularly complex because N deposition also results from an additional air pollutant that is not controlled by NAAQS for N oxides and PM. Thus, separate from the evaluation of standards for SO_X, the evaluation for N oxides and PM also considers current information (*e.g.,* spatial and temporal trends) related to the additional air pollutant, ammonia (NH_3), that contributes to N deposition and to PM components that do not contribute to N deposition. Evaluation of all of this information, together, is considered by the Administrator in reaching his proposed decision, as summarized in section II.E.

B. Air Quality and Deposition

The three criteria pollutants that are the focus of this review (SO_X, N oxides, and PM) include both gases and

particles. Both their physical state and chemical properties, as well as other factors, influence their deposition as N- or S-containing compounds. The complex pathway from emissions of these pollutants and their precursors to eventual deposition varies by pollutant and is influenced by a series of atmospheric processes and chemical transformations that occur at multiple spatial and temporal scales (PA, Chapters 2 and 6).

A complication in the consideration of the influence of these criteria pollutants on N deposition (and associated ecological effects) is posed by the contribution of other, non-criteria, pollutants in ambient air, specifically NH_3. As summarized below, although there is a decreasing temporal trend in emissions of N oxides, the coincident increasing trend in NH_3 emissions has reduced the influence of N oxides on N deposition (PA, sections 6.2.1, 6.4.2 and 7.2.3.3). Variability and temporal changes in the composition of PM, including with regard to N- (and S-) containing compounds, is another factor affecting decisions in this review (as discussed in sections II.1.d(3)) and II.3 below).

This section includes a brief summary of the major emission sources of SO_X, N oxides, and PM (section II.B.1). This is followed by a description of how those emissions are transported and transformed within the atmosphere to eventually contribute to S and N deposition (section II.B.1). Available information on current levels of emissions and air concentrations of these three pollutants across the U.S. and their trends is summarized in section II.B.2, accompanied by a description of estimated deposition levels across the U.S. and how they have changed over the past two decades. Finally, while many of the ecological effects examined in this review are associated with deposition of N and S, the NAAQS are set in terms of pollutant concentrations. To that end, section II.B.3 discusses the findings of analyses performed to relate ambient air concentrations of the relevant pollutants and S or N deposition, over a range of conditions (*e.g.,* pollutant, region, time period), and summarizes key observations that may inform the Administrator's judgments in this review.

1. Sources, Emissions and Atmospheric Processes Affecting SO_X, N Oxides and PM

Sulfur dioxide is one of a small group of highly reactive gases collectively known as SO_X. Sulfur dioxide is generally present at higher concentrations in the ambient air than the other gaseous SO_X species (ISA, Appendix 2, section 2.1) and, as a result, SO_2 is the indicator for the existing NAAQS for SO_X. The main anthropogenic source of SO_2 emissions is fossil fuel combustion (PA, section 2.2.2). Based on the 2020 National Emissions Inventory (NEI), the top three emission sources of SO_2 in the U.S. are: coal-fired electrical generating units (48% of total), industrial processes (27%), and other stationary source fuel combustion (9%).

Once emitted to the atmosphere, the atmospheric lifetime of SO_2 is typically less than 1–2 days; it can either remain in the gas phase or be oxidized to form sulfate particles (SO_4^{2-}). Modeling studies suggest that oxidation accounts for more than half of SO_2 removal on a national basis (PA, section 2.1.1). The rate of SO_2 oxidation accelerates with greater availability of oxidants. Oxidants are generally depleted near source stacks, so that more SO_2 is oxidized to SO_4^{2-} in cleaner air downwind of SO_X sources (2008 ISA, section 2.6.3.1). The atmospheric lifetime of SO_4^{2-} particles is longer, ranging from 2 to 10 days. As SO_4^{2-} particles are generally within the fine particle size range, they are a component of $PM_{2.5}$ (PA, section 2.1.1). The spatial distribution of both SO_2 and SO_4^{2-} deposition reflects the distribution of SO_X emissions (*i.e.,* most S deposition is in the eastern U.S.; PA, section 2.5.3) and wind patterns. Precipitation variability also modulates the spatial distribution of S wet deposition. In sum, both SO_2, and the SO_4^{2-} particles converted from SO_2, contribute to S deposition but do so over different time and geographic scales, with dry deposition of SO_2 typically occurring near the source, and wet deposition of sulfate particles being more regional in nature.

The term N oxides refers to all forms of oxidized nitrogen compounds, including nitric oxide (NO), NO_2, nitric acid (HNO_3), and particulate nitrate (NO_3^-). Most N oxides enter the atmosphere as either NO or NO_2, which are collectively referred to as NO_X (PA, section 2.1.2). Anthropogenic sources account for the majority of NO_X emissions in the U.S., per the 2020 NEI, with highway vehicles (26% of total), stationary fuel combustion which includes electric generating units (25%), and non-road mobile sources (19%) identified as the largest contributors to total emissions. Other anthropogenic NO_X sources include agricultural field burning, prescribed fires, and various industrial processes such as cement manufacturing and oil and gas production (PA, section 2.2.1).

Once emitted into the atmosphere, NO_X can deposit to the surface or be chemically converted to other gaseous N oxides, including HNO_3, as well as to particulate NO_3^-. Unlike particulate SO_4^{2-}, which exists almost entirely in the fine particle range, NO_3^- particles may occur either in the fine or coarse size range, such that not all particulate NO_3^- is a component of $PM_{2.5}$. Each form of oxidized N is removed from the atmosphere at different rates by both dry and wet deposition. As a general rule, the gas phase species tend to have shorter atmospheric lifetimes, either dry depositing (*e.g.,* as HNO_3) or quickly converting to particulate NO_3^-. Particulate NO_3^- is more efficiently removed by precipitation (wet deposition) and has a similar atmospheric lifetime as particulate SO_4^{2-} (2–10 days).

In addition to N oxides, there is another category of nitrogen pollutants, referred to as reduced nitrogen, which is distinct from N oxides but also contributes to nitrogen deposition. The most common form of reduced N in the air is ammonia gas (NH_3). Sources of NH_3 emissions include livestock waste (49% of total in 2020 NEI), fertilizer application (33%) and aggregate fires (11%). Ammonia tends to dry deposit near sources (PA, section 2.1.3). It can also be converted to particle form, as ammonium (NH_4^+), which can be transported farther distances and is most efficiently removed by precipitation (PA, section 2.1.3). Ammonia, unlike N oxides or $PM_{2.5}$, is not a criteria pollutant and is not directly regulated under CAA section 109.

In sum, particulate matter is both emitted to the atmosphere and can be formed in the atmosphere from precursor chemical gases (such as is the case for NO_X and SO_X). The components of $PM_{2.5}$ mass that contribute to S and N deposition are secondary products formed in the atmosphere after being emitted (*e.g.,* particulate sulfate, particulate NO_3^-, NH_4^+). There are other components of $PM_{2.5}$ mass that do not contribute to S and N deposition, *e.g.,* black carbon, organic carbon, dust (PA, section 2.4.3).

2. Recent Trends in Emissions, Concentrations, and Deposition

Emissions of SO_X, oxides of N, and PM have declined dramatically over the past two decades, continuing a longer-term trend (PA, section 2.2). NEI data indicate an 87% decrease in total SO_2 emissions between 2002 and 2022, including reductions of 91% in emissions from electricity generating units and 96% in emissions from mobile

sources. Total anthropogenic NO_X emissions have also trended downward across the U.S. between 2002 and 2022 at only slightly smaller percentages than SO_2. Nationwide estimates indicate a 70% decrease in anthropogenic NO_X emissions over this time period, driven in part by large emission reductions in the highway vehicle sector (84%) and from stationary fuel combustion (68%) (PA, section 2.2.1). In contrast with these declining 20-year trends in NO_X and SO_X emissions, the annual rate of NH_3 emissions has increased by over 20 percent since 2002 (PA, section 2.2.3). The two largest contributors are emissions from livestock waste and fertilizer application, which have increased by 11% and 44%, respectively, from 2002 to 2022. These trends in emissions have had ramifications for N deposition patterns across the U.S., as described further below.

As expected, the large reductions in SO_X and NO_X emissions have resulted in substantially lower ambient air concentrations in recent years relative to what was observed in previous periods. The State and Local Air Monitoring Stations (SLAMS) network supports the implementation of the NAAQS. In 2021, all ambient monitoring sites with valid SO_2 design values (n=333) [22] are less than the level of the existing secondary standard (500 ppb) [23] and more than 75 percent of the sites have design values less than 20 ppb (PA, section 2.4.2). These values reflect a downward trend over the past two decades with median 3-hour secondary SO_2 values down substantially from 2000 levels (from ~50 ppb to ~10 ppb).

Similar trends are evident in the data for the primary SO_2 standard (annual 99th percentile of 1-hour daily maximum concentrations, averaged over 3 years with a level of 75 ppb). In the 2019–2021 period, the maximum design value for the primary SO_2 standard was 376 ppb at a monitoring site near an industrial park in southeast Missouri. It is important to note that peak and mean SO_2 concentrations are higher at source-oriented sites than monitoring locations that are not source-oriented. Additionally, it is not uncommon for there to be high SO_2 values in areas with recurring volcanic eruptions (*e.g.,* Hawaii). In the mid-1990s, the median value of all sites with valid 1-hour SO_2 design values often exceeded 75 ppb (PA, Figure 2–26). Since then, the entire distribution of values (including source-oriented sites) has continued to decline such that the median value across the network of sites is now between 5 and 10 ppb (PA, Figure 2–26). The EPA also evaluated trends in annual average SO_2 data from 2000–2021 and observed improving trends of similar magnitude with the longer-term (annual) averaging time. It is important to note that both peak and mean SO_2 concentrations are higher at source-oriented sites than monitoring locations that are not source-oriented.

Regarding NO_2, design values at all 399 sites with valid secondary NO_2 design values (annual average concentrations) in 2021 are less than the 53 ppb level of the existing secondary standard,[24] and the majority of sites (98 percent) have design values that are less than 20 ppb. In 2021, the maximum was 30 ppb,[25] and the median was 7 ppb. As with SO_2, the more recent NO_2 design values also reflect a downward trend over the past two decades. Median annual NO_2 design values across the U.S. decreased by ~50% between 2000 and 2021 (15 ppb to 7 ppb).

Likewise, the median of the annual average $PM_{2.5}$ concentrations decreased substantially from 2000 to 2021 (from 12.8 $\mu g/m^3$ to 8 $\mu g/m^3$). The median of the annual 98th percentile 24-hour $PM_{2.5}$ concentrations at the more than 1000 sites monitored also decreased, from 32 $\mu g/m^3$ in 2000 to 21 $\mu g/m^3$ in 2021. Although both the annual average and 98th percentile 24-hour $PM_{2.5}$ concentrations decreased steadily from the early 2000s until 2016, these values have fluctuated in recent years due to large-scale wildfire events (PA, section 2.4.3; U.S. EPA, 2023, Figures 23 and 24).

These emission reductions and subsequent downward trends in air concentrations have also contributed to a nationwide decrease in N and S deposition (PA, sections 2.5.3 and 6.2.1). Total S deposition and N deposition declined by 68% and 15%, respectively, calculated as a nationwide, three-year average between 2000–2002 and 2019–2021 (PA, section 6.2.1). The trend in S deposition is more robust than for N because of the offsetting influence of increasing emissions of reduced forms of nitrogen over the same timeframe. The largest reductions in total S and N deposition are seen in regions downwind of point sources and transportation corridors related to emission reductions from electricity generating units and mobile sources.

3. Relationships Between Concentrations and Deposition

As the NAAQS are set in terms of pollutant concentrations, analyses in the PA evaluated relationships between criteria pollutant concentrations in ambient air and ecosystem deposition across the U.S. We examined these relationships over a range of conditions (*e.g.,* pollutant, region, time period), and considered deposition both near sources and at distance (allowing for pollutant transport and associated transformation). The findings of these analyses, described in detail in Chapter 6 and Appendix 6A of the PA, have informed consideration of indicators and levels for potential secondary standards based on consideration of deposition-related effects (PA, Chapter 7).

As is evident from the air quality-deposition analyses, relating ecosystem deposition to ambient air concentrations is not straightforward. Deposition rates vary across ecosystems nationally, and there is not a simple one-to-one relationship between ambient air concentrations of any one indicator and S or N deposition. As discussed above, the atmospheric processes that lead from pollutant emissions loading to eventual deposition to the earth's surface are complex. Multiple chemicals, both gaseous and particulate, from multiple types of sources contribute to S and N deposition. Further, both criteria pollutants and non-criteria pollutants contribute to N deposition. There are also multiple deposition pathways (*i.e.,* dry deposition and wet deposition) that can influence the spatial and temporal scales at which deposition occurs, which vary by pollutant and pollutant phase.

In light of these challenges, the PA employed five different approaches for considering relationships between S and N deposition rates and ambient air concentrations. First, as part of a ''real-world experiment,'' the PA analyses leveraged the recent downward trends in NO_X and SO_X emissions and corresponding air quality concentrations as well as the trends in deposition estimates (TDep or total deposition) to examine the correlation between

[22] A design value is a statistic that summarizes the air quality data for a given area in terms of the indicator, averaging time, and form of the standard. Design values can be compared to the level of the standard and are typically used to designate areas as meeting or not meeting the standard and assess progress towards meeting the NAAQS. Design values are computed and published annually by EPA (*https://www.epa.gov/air-trends/air-quality-designvalues*).

[23] The existing secondary standard for SO_2 is 0.5 ppm (500 ppb), as a 3-hour average, not to be exceeded more than once per year.

[24] Sites in the contiguous U.S. have met the existing NO_2 secondary standard since around 1991 (PA, Figure 2–22).

[25] The maximum annual average NO_2 concentrations has been at, slightly above or slightly below 30 ppb since about 2008, with the highest 3-year average value just above 30 ppb (PA, Figures 2–22 and 7–9).

observed decreases in emissions and concentration and observed changes in deposition over the past two decades (PA, section 6.2.1). The TDep estimates used in these analyses are based on a hybrid approach that involves a fusion of measured and modeled values, where measured values are given more weight at the monitoring locations and modeled data are used to fill in spatial gaps and provide information on chemical species that are not measured by routine monitoring networks (Schwede and Lear, 2014).[26] For the second approach, we assessed how air quality concentrations and associated deposition levels are related within a chemical-transport model (CMAQ [27]) both nationally and then at certain Class I areas [28] (PA, section 6.2.2.1) where additional monitoring data are collected as part of the Clean Air Status and Trends Network (CASTNET) and the Interagency Monitoring of Protected Visual Environments (IMPROVE) networks. As a third approach, we analyzed the relationships across a limited number of monitoring locations (in Class I areas) where both air quality data (CASTNET and IMPROVE) and wet deposition of S and N was measured to evaluate the associations between concentrations and deposition at a local scale (PA, section 6.2.2.2 and 6.2.2.3). The fourth approach also considered the local associations between the two terms at the local scale but did so using a broader set of ambient air concentration measurements (*i.e.,* all valid SO_2, NO_2, and $PM_{2.5}$ measurements at SLAMS across the U.S.) and a hybrid set of deposition estimates (TDep) (PA, section 6.2.3).

Finally, in recognition of the fact that air quality at upwind locations can also influence downwind deposition, the fifth approach used a trajectory model (HYSPLIT—The Hybrid Single-Particle Lagrangian Integrated Trajectory model) to identify upwind areas where emissions might be expected to influence deposition at downwind ecoregions (PA, section 6.2.4 and Appendix 6A).[29] Once those potential zones of influence were established, we evaluated the relationships between air quality metrics for the three pollutants [30] at sites within those zones with deposition estimates in the downwind ecoregion, as 3-year averages for five periods: 2001–2003, 2006–2008, 2010–2012, 2014–2016 and 2018–2020. The metrics, Ecoregion Air Quality Metrics (EAQMs), include a weighted-average (EAQM-weighted) and a maximum metric (EAQM-max). The EAQM-max is the maximum metric value among the sites linked to the downwind ecoregion and, for the EAQM-weighted, the value of each site linked to the downwind ecoregion was weighted by how often the forward HYSPLIT trajectory crossed into the ecoregion, *i.e.,* sites with more frequent trajectory intersections with the ecoregion are weighted higher (PA, section 6.2.4.1).

As with any assessment, there are uncertainties and limitations associated with the analyses summarized above. These are more fully discussed in the PA (PA, sections 6.3 and 6.4). The evaluation of measured air quality concentrations (SO_2, NO_2, and $PM_{2.5}$) and TDep estimates of deposition at all SLAMS (generally composed of sites that use either a Federal Reference Method [FRM] or a Federal Equivalence Method [FEM]) is a robust analysis (*i.e.,* large number of monitors distributed across the U.S.) and particularly relevant given that compliance with the current standards (both primary and secondary) is judged using design value metrics based on measurements at the current SO_2, NO_2 and $PM_{2.5}$ monitors. However, these site-based comparisons do not account for deposition associated with the transport of pollutants emitted some distance upwind. Each of the other analyses completed to bolster this analysis have their own limitations ranging from model uncertainty to limited geographical scope.

The full set of quantitative results of the characterization of air quality and deposition relationships are discussed more thoroughly in Chapter 6 and Appendix 6A of the PA. In combination, these analyses supported the PA conclusion of a strong association between SO_2 and S deposition. Regarding N oxides and PM, however, the results, and associated information, indicated more variable relationships between NO_2 concentrations and N deposition, and $PM_{2.5}$ concentrations with either S or N deposition.

For SO_2, annual monitored SO_2 concentrations, at existing monitors within the SLAMS network, averaged over 3 years at the national scale were highly correlated to S deposition estimates in the TDep dataset at the local scale (correlation coefficient of 0.70),[31] especially in the earlier periods of the record and across the eastern U.S. (PA, section 6.2.3). This association was confirmed by the relationships between SO_2 annual values at the identified upwind sites of influence and S deposition estimates from TDep in downwind ecoregions, especially in those locations where the annual average SO_2 concentrations are greater than 5 ppb (PA, section 6.2.4.2). Finally, we note that the observed declines in national levels of S deposition over the past two decades have occurred during a period in which emissions of SO_2 have also declined sharply (PA, sections 6.2.1 and 6.4.1).

Analyses in the PA also investigated relationships between S deposition and air quality metrics other than the current indicator species (SO_2) in a limited number of circumstances. For example, an evaluation of the association between SO_4^{2-} and total S deposition across 27 Class I areas where data for both parameters were available, concluded that the correlations between particle sulfate and total sulfate (*i.e.,* $SO_2 + SO_4^{2-}$) with total S deposition (correlation coefficients of 0.55 and 0.61, respectively) was lower than what was exhibited for SO_2 and S deposition at the SLAMS (PA, section 6.2.2). The analyses also concluded that there was poor correlation (correlation coefficient of 0.33) between $PM_{2.5}$ mass, as measured at IMPROVE sites, with total S deposition estimates for those sites (PA, sections 2.3.3 and 6.2.2.3). While these analyses are based on data at a relatively limited number of sites, as compared to the SLAMS network, the

[26] Other than the estimates associated with the CMAQ analysis (second approach referenced above), the deposition estimates used in these analyses are those provided by the National Atmospheric Deposition Program, TDep Science Committee. One of the outputs of this effort are annual datasets of total deposition estimates in the U.S., which are referred to as the TDep datasets (technical updates available from NADP, 2021; ISA, appendix 2, section 2.6).

[27] The CMAQ is a state of the science photochemical air quality model that relies on scientific first principles to simulate the concentration of airborne gases and particles and the deposition of these pollutants back to Earth's surface under user-prescribed scenarios. See *https://www.epa.gov/cmaq for more detail.*

[28] Areas designated as Class I include all international parks, national wilderness areas which exceed 5,000 acres in size, national memorial parks which exceed 5,000 acres in size, and national parks which exceed 6,000 acres in size, provided the park or wilderness area was in existence on August 7, 1977. Other areas may also be Class I if designated as Class I consistent with the CAA.

[29] Upwind sites of influence were identified for all 84 ecoregions (level III categorization) in the contiguous U.S.

[30] For SO_2, there were two sets of metrics: one based on an annual average and one based on the 2nd highest 3-hour maximum concentration in the year. Both the NO_2 and $PM_{2.5}$ metrics are annual averages. For relating to 3-year average deposition, all are averaged across three years.

[31] The correlation coefficients are based on Spearman's rank correlation coefficient. These coefficients are generally used to assess how well the relationship between two variables can be described via a monotonic function. The term ''r value'' is sometimes used as shorthand for this correlation coefficient. Higher values indicate that the two variables are highly associated with one another (can range from 1.0 to −1.0).

results suggest that there are no clear advantages to considering $PM_{2.5}$ mass, particle sulfate, or total sulfate as an indicator for a secondary NAAQS, over using SO_2.

Both NO_2 and certain components of $PM_{2.5}$ can contribute to N deposition. As is the case for SO_2 and S deposition, there are multiple pathways for N deposition (dry and wet), and multiple scales of N deposition (local and regional). However, there are some additional complications in the consideration of how air quality concentrations (*i.e.,* NO_2 and $PM_{2.5}$ mass) are associated with eventual N deposition. First, not all N deposition is caused by the criteria pollutants (PA, Chapter 2 and section 6.1.1). Ammonia emissions also lead to N deposition, especially through dry deposition at local scales. Second, only certain components of $PM_{2.5}$ mass contribute to N deposition (*i.e.,* NO_3^- and NH_4^+). As a result of these two factors, the association between NO_2 concentrations and N deposition, and $PM_{2.5}$ concentrations and N deposition is less robust than what is observed for SO_2. Our multi-faceted approach to evaluating these relationships confirmed this expectation. For example, when comparing NO_2 observations at SLAMS across the U.S. against the N deposition estimates from TDep, there are weaker associations than what is observed in the similar SO_2 comparisons (PA, section 6.4.2). There is little correlation for N deposition with concentrations of NO_2, as evidenced by a Spearman's correlation coefficient of 0.38, compared to 0.70 for SO_2 and S deposition (PA, Table 6–6 and Table 6–4). Further, the trajectory-based analyses of the relationships between NO_2 annual values in the identified upwind zones of influence and N deposition estimates from TDep in downwind ecoregions indicate negative correlations (PA, Table 6–10). These negative correlations are observed for both the EAQM-weighed and EAQM-max values. This relative lack of association was confirmed by considering national trends over the past 20 years, where sharp declines in NO_2 emissions and concentrations are linked in time with sharp declines in oxidized N deposition (PA, Table 6–2), but not associated with recent trends in total or reduced atmospheric N deposition. Since 2010, NO_2 concentrations have continued to drop while N deposition has remained steady (PA, section 6.2.1). As noted for S deposition and S compound metrics above, the PA also investigated relationships between N deposition and air quality metrics other than the current indicator species (NO_2). Across the 27 Class I areas where collocated data were available, the PA evaluated the relationships between several air quality parameters (*e.g.,* nitric acid, particulate NO_3^-, and NH_4^+) and, as for S deposition and S compound metrics, the PA concluded there were no clear advantages over the consideration of NO_2 or $PM_{2.5}$ mass. In sum, the evidence suggests that NO_2 would be a weak indicator of total atmospheric N deposition, especially in areas where ammonia is prevalent or where $PM_{2.5}$ mass is dominated by species other than NO_3^- or NH_4^+ (PA, section 6.4.2).

C. Welfare Effects Evidence

The information summarized here is based on our scientific assessment of the welfare effects evidence available in this review; this assessment is documented in the ISA [32] and its policy implications are further discussed in the PA (and summarized in section II.E.1 below). More than 3,000 studies are newly available since the last review and considered in the ISA.[33] While expanding the evidence for some effect categories, studies on acid deposition, a key group of effects from the last review, are largely consistent with the evidence that was previously available. The subsections below briefly summarize the following aspects of the evidence: the nature of welfare effects of S oxides, N oxides and PM (section II.C.1); the potential public welfare implications (section II.C.2); and exposure concentrations and deposition-related metrics (section II.C.3).

1. Nature of Effects

This welfare effects evidence base available in the current review includes decades of extensive research on the ecological effects oxides of nitrogen, oxides of sulfur and PM. In the sections below we summarize the nature of the direct effects of gas-phase exposure to oxides of nitrogen and sulfur (section II.C.1.a), acid deposition-related ecological effects (section II.C.1.b), N enrichment and associated effects (section II.C.1.c), and other effects (section II.C.1.d).

[32] The ISA builds on evidence and conclusions from previous assessments, focusing on synthesizing and integrating the newly available evidence (ISA, section IS.1.1). Past assessments are cited when providing further details not repeated in newer assessments.

[33] The study count and citations are available on the project page for the ISA on the Health & Environmental Research Online (HERO) website documents these studies (*https://heronet.epa.gov/heronet/index.cfm/project/page/project_id/2965*).

a. Direct Effects of SO_X and N Oxides

There is a well-established body of scientific evidence that has shown that acute and chronic exposures to oxides of N and S, such as SO_2, NO_2, NO, HNO_3 and peroxyacetyl nitrate (PAN) in the air, are associated with negative effects on vegetation. Such scientific evidence, as was available in 1971, was the basis for the current secondary NAAQS for oxides of sulfur and oxides of nitrogen. The current scientific evidence continues to demonstrate such effects, with the ISA specifically concluding that the evidence is sufficient to infer a causal relationship between gas-phase SO_2 and injury to vegetation (ISA, Appendix 3, section 3.6.1), and between gas-phase NO, NO_2 and PAN and injury to vegetation (ISA, Appendix 3, section 3.6.2). The ISA additionally concluded the evidence to be sufficient to infer a causal relationship between exposure to HNO_3 and changes to vegetation, noting that experimental exposure can damage leaf cuticle of tree seedlings and HNO_3 concentrations have been reported to have contributed to declines in lichen species in the Los Angeles basin (ISA, Appendix 3, section 3.6.3).

Specifically for SO_X, high concentrations in the first half of the twentieth century have been blamed for severe damage to plant foliage that occurred near large ore smelters during that time (ISA, Appendix 3, section 3.2). In addition to foliar injury, which is usually a rapid response, SO_2 exposures have also been documented to reduce plant photosynthesis and growth. The appearance of foliar injury can vary significantly among species and growth conditions (which affect stomatal conductance). For lichens, damage from SO_2 exposure has been observed to include reduction in metabolic functions that are vital for growth and survival (*e.g.,* decreases in photosynthesis and respiration), damage to cellular integrity (*e.g.,* leakage of electrolytes), and structural changes (ISA, Appendix 3, section 3.2; Belnap et al., 1993; Farmer et al., 1992, Hutchinson et al., 1996).

Although there is evidence of plant injury associated with SO_2 exposures dating back more than a century (ISA, Appendix 3, section 3.2), as exposures have declined in the U.S., some studies in the eastern U.S. have reported increased growth in some SO_2-sensitive tree species (*e.g.,* Thomas et al., 2013). Although the authors attributed the growth response to reductions in SO_2-associated acid deposition, and related recovery from soil acidification, the relative roles of different pathways are

unclear as a historical deposition record was not available (ISA, Appendix 3, section 3.2). Other researchers have suggested that the observed response was related to the fact that the trees were growing on a limestone outcrop that could be well buffered from soil acidification (Schaberg et al., 2014). This seems to suggest a somewhat faster recovery than might be expected from deposition-related soil acidification, which may indicate a relatively greater role for changes in ambient air concentrations of SO_2, in combination with changes in other gases, than was previously understood (ISA, Appendix 3, section 3.2 and Appendix 5, section 5.2.1.3).

The evidence base evaluated in the 1993 *Air Quality Criteria Document for Oxides of N* included evidence of phytotoxic effects of NO, NO_2, and PAN on plants through decreasing photosynthesis and induction of visible foliar injury (U.S. EPA, 1993 [1993 AQCD]). The 1993 AQCD additionally concluded that concentrations of NO, NO_2, and PAN in the atmosphere were rarely high enough to have phytotoxic effects on vegetation. Little new information is available since that time on these phytotoxic effects at concentrations currently observed in the U.S. (ISA, Appendix 3, section 3.3).

The evidence indicates that HNO_3 had a role in observed declines in lichen species in the 1970s in the Los Angeles basin (ISA, Appendix 3, section 3.3). A 2008 resampling of areas shown to be impacted in the past by HNO_3 found community shifts, declines in the most pollutant-sensitive lichen species, and increases in abundance of nitrogen-tolerant lichen species compared to 1976–1977, indicating that these lichen communities have not recovered and had experienced additional changes (ISA, Appendix 3, section 3.4). The recently available evidence on this topic also included a study of six lichen species that reported changes in physiology and functioning including decreased chlorophyll content and chlorophyll fluorescence, decreased photosynthesis and respiration, and increased electrolyte leakage from HNO_3 exposures for 2–11 weeks (daily peak levels near 50 ppb) in controlled chambers. (ISA, Appendix 3, section 3.4).

b. Acid Deposition-Related Ecological Effects

The connection between SO_X and N oxide emissions to ambient air, atmospheric deposition of N and/or S, and the acidification of acid-sensitive soils and surface waters is well documented with many decades of evidence, particularly in the eastern U.S. (ISA, section IS.5; Appendix 8, section 8.1). In the atmosphere, SO_X and N oxides undergo reactions to form various acidic compounds that are removed from the atmosphere through deposition. Acidifying deposition can affect biogeochemical processes in soils, with ramifications for terrestrial biota and for the chemistry and biological functioning of associated surface waters (ISA, Appendix 7, section 7.1). These effects depend on the magnitude and rate of deposition, as well as multiple biogeochemical processes that occur in soils and waterbodies.

Soil acidification is influenced by the deposition of inorganic acids (HNO_3 and H_2SO_4), and by chemical and biological processes. When NO_3^-, or SO_4^{2-} leach from soils to surface waters, an equivalent number of positive cations, or countercharge, are also transported. If the countercharge is provided by a base cation (*e.g.,* calcium, [Ca^{2+}], magnesium [Mg^{2+}], sodium [Na^+], or potassium [K^+]), rather than hydrogen ions (H^+), the leachate is neutralized, but the soil becomes more acidic from the hydrogen ions left behind and the base saturation of the soil is reduced by the loss of the base cation. Depending on the relative rates of soil processes that contribute to the soil pools of H^+ and base cations, such as weathering, continued SO_4^{2-} or NO_3^- leaching can deplete the soil base cation pool, which contributes to increased acidity of the leaching soil water, and by connection, the surface water. Accordingly, the ability of a watershed to neutralize acidic deposition is determined by a variety of biogeophysical factors including weathering rates, bedrock composition, vegetation and microbial processes, physical and chemical characteristics of soils, and hydrology (ISA Appendix 4, section 4.3).

(1) Freshwater Ecosystems

As was the case in the last review, the body of evidence available in this review, including that newly available, is sufficient to infer a causal relationship between N and S deposition and the alteration of freshwater biogeochemistry (ISA, section IS.6.1). Additionally, based on the previously available evidence, the current body of evidence is also sufficient to conclude that a causal relationship exists between acidifying deposition and changes in biota, including physiological impairment and alteration of species richness, community composition, and biodiversity in freshwater ecosystems (ISA, section IS.6.3).

The effects of acid deposition on aquatic systems depend largely upon the ability of the system to neutralize additional acidic inputs from the environment, whether from the atmosphere or from surface inputs. There is a large amount of variability between freshwater systems in this regard, which reflects their underlying geology as well as their history of acidic inputs. Accordingly, different freshwater systems (*e.g.,* in different geographic regions) respond differently to similar amounts of acid deposition. The main factor in determining sensitivity is the underlying geology of an area and its ability to provide soil base cations through weathering to buffer acidic inputs (ISA, Appendix 8, section 8.5.1). As noted in the ISA, ''[g]eologic formations having low base cation supply, due mainly to low soil and bedrock weathering, generally underlie the watersheds of acid-sensitive lakes and streams'' (ISA, Appendix 8, p. 8–58).

Longstanding evidence has well characterized the changes in biogeochemical processes and water chemistry caused by N and S deposition to surface waters and their watersheds and the ramifications for biological functioning of freshwater ecosystems (ISA, Appendix 8, section 8.1). The 2020 ISA found that the newly available scientific research ''reflects incremental improvements in scientific knowledge of aquatic biological effects and indicators of acidification as compared with knowledge summarized in the 2008 ISA'' (ISA, Appendix 8, p. 8–80). Previously and newly available studies ''indicate that aquatic organisms in sensitive ecosystems have been affected by acidification at virtually all trophic levels and that these responses have been well characterized for several decades'' (ISA, Appendix 8, p. 8–80). For example, information reported in the previous 2008 ISA ''showed consistent and coherent evidence for effects on aquatic biota, especially algae, benthic invertebrates, and fish that are most clearly linked to chemical indicators of acidification'' (ISA, Appendix 8, p. 8–80). These indicators are surface water pH, base cation ratios, ANC, and inorganic aluminum (Al) concentration (ISA, Appendix 8, Table 8–9).

The effects of waterbody acidification on fish species are especially well understood in the scientific literature, and many species (*e.g.,* brown and brook trout and Atlantic salmon) have been documented to have experienced adverse effects from acidification (ISA, Appendix 8, section 8.3). Among these species, the earliest lifestages are most

sensitive to acidic conditions. Many effects of acidic surface waters on fish, particularly effects on gill function or structure, relate to the combination of low pH and elevated dissolved Al (ISA, Appendix 8, section 8.3.6.1). In general, biological effects in aquatic ecosystems are primarily attributable to low pH and high inorganic aluminum concentration (ISA, p. ES–14). Waterbody pH largely controls the bioavailability of Al, which is toxic to fish, and aluminum mobilization is largely confined to waters with a pH below about 5.5, which the ISA describes as corresponding to an ANC in the range of about 10 to 30 μeq/L in low to moderate DOC waters of the Northeast (ISA, Appendix 7, section 7.1.2.6 and Appendix 8, section 8.6.4).

The parameter ANC is an indicator of the buffering capacity of natural waters against acidification. Although ANC does not directly affect biota, it is an indicator of acidification that relates to pH and aluminum levels (ISA, p. ES–14), or watershed characteristics like base cation weathering (BCw) rate (ISA, Appendix 8, sections 8.1 and 8.3.6.3). Accordingly, ANC is commonly used to describe the potential sensitivity of a freshwater system to acidification-related effects. It can be measured in water samples and is also often estimated for use in water quality modeling, as is done in the aquatic acidification risk assessment for this review, as summarized in section II.D below. Water quality models are generally better at estimating ANC than at estimating other indicators of acidification-related risk, such as pH. Acid neutralizing capacity is estimated as the molar sum of strong base cations minus the molar sum of strong acid anions, specifically including SO_4^{2-} and NO_3^- (*e.g.,* Driscoll et al., 1994). Thus, values below zero indicate a deficit in the ability to buffer acidic inputs, and increasing values above zero represent increasing buffering capability for acidic inputs. Further, across waterbodies within impacted areas of Shenandoah National Park streams and Adirondack Mountain lakes, a positive relationship has often been observed between ANC and number of fish species, at least for the ANC range from about zero to 50 μeq/L (ISA, Appendix 7, section 7.1.2.6; Cosby et al., 2006; Sullivan et al., 2006, Bulger et al., 1999).

Values of ANC can also be influenced by high concentrations of naturally occurring organic acids, which can reduce bioavailability of Al, buffering effects usually associated with low pH and high total Al concentrations (Waller et al., 2012; ISA, Appendix 8, section 8.3.6.4); in waters where that occurs, ANC may not be a good indicator of risk to biota.

In addition to acidity of surface waters quantified over weeks or months, waterbodies can also experience spikes in acidity in response to episodic precipitation or rapid snowmelt events. In these events (hours-days), a surge or pulse of drainage water, containing acidic compounds, is routed through upper soil horizons rather than the deeper soil horizons that would usually provide buffering for acidic compounds (ISA, Appendix 7, section 7.1). While some streams and lakes may have chronic or base flow chemistry that provides suitable conditions for aquatic biota, they may experience occasional acidic episodes with the potential for deleterious consequences to sensitive biota (ISA, Appendix 8, section 8.5). For example, in some impacted northeastern waterbodies, ANC levels may dip below zero for hours to days or weeks in response to such events, while waterbodies labeled chronically acidic have ANC levels below zero throughout the year (ISA, Appendix 7, section 7.1.1.2; Driscoll et al., 2001). Accordingly, headwater streams in both the eastern and western U.S. tend to be more sensitive to such episodes due to their smaller watersheds and, in the east, their underlying geology (ISA, Appendix 8, section 8.5.1).

National survey data dating back to the early 1980s through 2004, that were available for the 2008 ISA, indicated acidifying deposition had acidified surface waters in the southwestern Adirondacks, New England uplands, eastern portion of the upper Midwest, forested Mid-Atlantic highlands, and Mid-Atlantic coastal plain (2008 ISA, section 4.2.2.3; ISA, Appendix 8, section 8.5.1). For example, a survey of waterbodies in the Adirondacks in 1984–1987 found 27% of streams to have ANC values below zero, with a minimum value of −134 microequivalents per liter (μeq/L) (Sullivan et al., 2006). Values of ANC below 20 μeq/L in Shenandoah stream sites were associated with fewer fish of sensitive species compared to sites with higher ANC (Bulger et al., 1999). A more recent study of two groups of Adirondack lakes for which water quality data were available from 1982 and 1992, respectively, reported significant increases in ANC in the large majority of those lakes, with the magnitude of the increases varying across the lakes (Driscoll et al., 2016; ISA, Appendix 7, section 7.1.3.1). As described in the ISA, ''[a]cidic waters were mostly restricted to northern New York, New England, the Appalachian Mountain chain, upper Midwest, and Florida'' (ISA, Appendix 8, p. 8–60). Despite the appreciable reductions in acidifying deposition that have occurred in the U.S. since the 1960s and 1970s, aquatic ecosystems across the U.S. are still experiencing effects from historical contributions of N and S (ISA, Appendix 8, section 8.6).

(2) Terrestrial Ecosystems

There is longstanding evidence that changes in soil biogeochemical processes caused by acidifying deposition of N and S to terrestrial systems are linked to changes in terrestrial biota, with associated impacts on ecosystem characteristics. The currently available evidence, including that newly available in this review, supports and strengthens this understanding (ISA, Appendix 5, section 5.1). Consistent with conclusions in the last review, the current body of evidence is sufficient to infer a causal relationship between acidifying deposition and alterations of biogeochemistry in terrestrial ecosystems. Additionally, and consistent with conclusions in the last review, the current body of evidence is sufficient to infer a causal relationship between acidifying N and S deposition and the alteration of the physiology and growth of terrestrial organisms and the productivity of terrestrial ecosystems. The current body of evidence is also sufficient to conclude that a causal relationship exists between acidifying N and S deposition and alterations of species richness, community composition, and biodiversity in terrestrial ecosystems (2008 ISA, sections 4.2.1.1 and 4.2.1.2; 2020 ISA, Appendix 4, section 4.1 and Appendix 5, sections 5.7.1 and 5.7.2).

Deposition of acidifying compounds to acid-sensitive soils can cause soil acidification, increased mobilization of Al from soil to drainage water, and deplete the pool of exchangeable base cations in the soil (ISA, Appendix 5, section 5.2 and Appendix 4, sections 4.3.4 and 4.3.5). The physiological effects of acidification on terrestrial biota include slower growth and increased mortality among sensitive plant species, which are generally attributable to physiological impairment caused by Al toxicity (related to increased availability of inorganic Al in soil water) and a reduced ability of plant roots to take up base cations (ISA, Appendix 4, section 4.3 and Appendix 5, section 5.2). The U.S. tree species most studied with regard to effects of acid deposition are red spruce and sugar maple, although there is also evidence for other tree species such as flowering

dogwood (ISA, Appendix 5, section 5.2.1).

The physiological effects of acidifying deposition on terrestrial biota can also result in changes in species composition whereby sensitive species are replaced by more tolerant species, or the sensitive species that were dominant in the community become a minority. For example, increasing soil cation availability (as in Ca^{2+} addition or gradient experiments) was associated with greater growth and seedling colonization for sugar maple while American beech was more prevalent on soils with lower levels of base cations where sugar maple is less often found (ISA, Appendix 5, section 5.2.1.3.1; Duchesne and Ouimet, 2009). In a study of understory species composition, soil acid-base chemistry was found to be a predictor of understory species composition (ISA, Appendix 5, section 5.2.2.1). Additionally, limited evidence, including a recent S addition study and agricultural soil gradient study, indicated that soil acid-base chemistry predicted and was correlated with diversity and composition of soil bacteria, fungi, and nematodes (ISA, Appendix 5, section 5.2.4.1).

In addition to Ca^{2+} addition experiments, the recently available evidence also includes addition or gradient studies evaluating relationships between soil chemistry indicators of acidification (*e.g.,* soil pH, base cation to aluminum (Bc:Al) ratio, base saturation, and Al) and ecosystem biological endpoints, including physiological and community responses of trees and other vegetation, lichens, soil biota, and fauna (ISA, Appendix 5, Tables 5–2 and 5–6). Further, the 2020 ISA reports on several large observational studies evaluating statistical associations between tree growth or survival, as assessed at monitoring sites across the U.S. and estimates of average deposition of S or N compounds at those sites over time periods on the order of 10 years (ISA, Appendix 5, section 5.5.2 and Appendix 6, section.6.2.3.1; Dietze and Moorcroft, 2011; Thomas et al., 2010; Horn et al., 2018). Negative associations were observed for survival and growth in several species or species groups with S deposition metrics; positive and negative associations were reported with N deposition (PA, sections 5.3.2.3 and 5.3.4 and Appendix 5B).

Although there has been no systematic national survey of U.S. terrestrial ecosystem soils, the forest ecosystems considered the most sensitive to terrestrial acidification from atmospheric deposition include forests of the Adirondack Mountains of New York, Green Mountains of Vermont, White Mountains of New Hampshire, the Allegheny Plateau of Pennsylvania, and mountain top and ridge forest ecosystems in the southern Appalachians (2008 ISA, Appendix 3, section 3.2.4.2; ISA, Appendix 5, section 5.3). Underlying geology is the principal factor governing the sensitivity of both terrestrial and aquatic ecosystems to acidification from S and N deposition. Geologic formations with low base cation supply (*e.g.,* sandstone, quartzite), due mainly to low weathering rates, generally underlie these acid sensitive watersheds. Other factors also contribute to the overall sensitivity of an area to acidifying nitrogen and sulfur deposition, including topography, soil chemistry, land use, and hydrology (ISA, Appendix 5, section 5.3). For example, ''[a]cid-sensitive ecosystems are mostly located in upland mountainous terrain in the eastern and western U.S. and are underlain by bedrock that is resistant to weathering, such as granite or quartzite sandstone'' (ISA, Appendix 7, p. 7–45). Further, as well documented in the evidence, biogeochemical sensitivity to deposition-driven acidification (and eutrophication [see section 4.3 below]) is the result of historical loading, geologic/soil conditions (*e.g.,* mineral weathering and S adsorption), and nonanthropogenic sources of N and S loading to the system (ISA, Appendix 7, section 7.1.5).

Recently available evidence includes some studies describing early stages of recovery from soil acidification in some eastern forests. For example, studies at the Hubbard Brook Experimental Forest in New Hampshire reported indications of acidification recovery in soil solution measurements across the period from 1984 to 2011 (ISA, Appendix 4, section 4.6.1; Fuss et al., 2015). Another study of 27 sites in eastern Canada and the northeastern U.S. found reductions in wet deposition SO_4^{2-} were associated with increases in soil base saturation and decreases in exchangeable Al (ISA, Appendix 4, section 4.6.1; Lawrence et al., 2015). Recent modeling analyses indicate extended timeframes for recovery are likely, as well as delays or lags related to accumulated pools of S in forest soils (ISA, Appendix 4, section 4.6.1).

c. Nitrogen Enrichment and Associated Ecological Effects

The numerous ecosystem types that occur across the U.S. have a broad range of sensitivity to N enrichment. Organisms in their natural environments are commonly adapted to the nutrient availability in those environments. Historically, N has been the primary limiting nutrient for plants in many ecosystems. In such ecosystems, when the limiting nutrient, N, becomes more available, whether from atmospheric deposition, runoff, or episodic events, the subset of plant species able to most effectively use the higher nitrogen levels may out-compete other species, leading to a shift in the community composition that may be dominated by a smaller number of species, *i.e.,* a community with lower diversity (ISA, sections IS.6.1.1.2, IS.6.2.1.1 and IS.7.1.1, Appendix 6, section 6.2.4 and Appendix 7, section 7.2.6.6). Thus, change in the availability of nitrogen in nitrogen-limited systems can affect growth and productivity, with ramifications on relative abundance of different species of vegetation, and potentially further and broader ramifications on ecosystem processes, structure, and function.

Both N oxides and reduced forms of nitrogen (NH_X) can contribute to N enrichment. In addition to atmospheric deposition, other sources of S and N can play relatively greater or lesser roles in contributing to S and N inputs, depending on location. For example, many waterbodies receive appreciable amounts of N from agricultural runoff and municipal or industrial wastewater discharges. For many terrestrial and freshwater ecosystems, sources of N other than atmospheric deposition, including fertilizer and waste treatment, contribute to ecosystem total N with contributions that can be larger than that from atmospheric deposition (ISA Appendix 7, sections 7.1 and 7.2). Additionally, the impacts of historic deposition in both aquatic and terrestrial ecosystems pose complications to discerning the potential effects of more recent lower deposition rates.

(1) Aquatic and Wetland Ecosystems

Nitrogen additions, including from atmospheric deposition, to freshwater, estuarine and near-coastal ecosystems can contribute to eutrophication, which typically begins with nutrient-stimulated rapid algal growth developing into an algal bloom that can, depending on various site-specific factors, be followed by anoxic conditions associated with the algal die-off (ISA, ES.5.2). Decomposition of the plant biomass from the subsequent algal die-off contributes to reduced waterbody oxygen, which in turn can affect higher-trophic-level species, *e.g.,* contributing to fish mortality (ISA, p. ES–18).

The extensive body of evidence in this area is sufficient to infer causal relationships between N deposition and

the alteration of biogeochemistry in freshwater, estuarine and near-coastal marine systems (ISA, Appendix 7, sections 7.1 and 7.2). Further, consistent with findings in the last review, the current body of evidence is sufficient to infer a causal relationship between N deposition and changes in biota, including altered growth and productivity, species richness, community composition, and biodiversity due to N enrichment in freshwater ecosystems (ISA, Appendix 9, section 9.1). The body of evidence is sufficient to infer a causal relationship between N deposition and changes in biota, including altered growth, total primary production, total algal community biomass, species richness, community composition, and biodiversity due to N enrichment in estuarine environments (ISA, Appendix 10, section 10.1).

The impact of N additions on wetlands, and whether they may serve as a source, sink, or transformer of atmospherically deposited N, is extremely variable and depends on the type of wetland and other factors, such as physiography, and local hydrology, as well as climate (ISA, section IS.8.1 and Appendix 11, section 11.1). Studies generally show N enrichment to decrease the ability of wetlands to retain and store N, which may diminish the wetland ecosystem service of improving water quality (ISA, section IS.8.1). Consistent with the evidence available in the last review, the current body of evidence is sufficient to infer a causal relationship between N deposition and the alteration of biogeochemical cycling in wetlands. Newly available evidence regarding N inputs and plant physiology expands the evidence base related to species diversity. The currently available evidence, including that newly available, is sufficient to infer a causal relationship between N deposition and the alteration of growth and productivity, species physiology, species richness, community composition, and biodiversity in wetlands (ISA, Appendix 11, section 11.10).

The relative contribution of atmospheric deposition to total wetland N loading varies with wetland type, with bogs receiving the greatest contribution and accordingly being most vulnerable to nutrient enrichment effects of N deposition (ISA, Appendix 11, section 11.1). For example, bogs, which receive 70–100% of hydrological input from rainfall, are more sensitive to N deposition than fens (55–83% as rainfall), which are more sensitive than coastal wetlands (10–20% as rainfall) (ISA, Appendix 11, section 11.10). For freshwater fens, marshes, and swamps, inputs from ground and surface water are often of similar order of magnitude as that from precipitation, while estuarine and coastal wetlands receive water from multiple sources, with precipitation being among the smaller of those sources (ISA, Appendix 11, section 11.1).

Nitrogen loading and other factors contribute to nutrient enrichment, which contributes to eutrophication. Such nitrogen-driven eutrophication alters freshwater biogeochemistry and can impact physiology, survival, and biodiversity of sensitive aquatic biota. Evidence newly available in this review provides insights regarding N enrichment and its impacts in several types of aquatic systems, including freshwater streams and lakes, estuarine and near-coastal systems, and wetlands. With regard to freshwaters, for example, studies published since the 2008 ISA augment the evidence base for high-elevation waterbodies where the main N source is atmospheric deposition. Recent evidence continues to indicate that N limitation is common in oligotrophic waters in the western U.S., with shifts in nutrient limitation, from N limitation, to between N and phosphorus (P) limitation, or to P limitation, reported in some alpine lake studies (ISA, Appendix 9, section 9.1.1.3). Small inputs of N in such water bodies have been reported to increase nutrient availability or alter the balance of N and P, with the potential to stimulate growth of primary producers and contribute to changes in species richness, community composition, and diversity.

Another type of N loading effect in other types of freshwater lakes includes a role in the composition of freshwater algal blooms and their toxicity (ISA, Appendix 9, section 9.2.6.1). Information in this review, including studies in Lake Erie, indicates that growth of some harmful algal species, including those that produce microcystin, are favored by increased availability of N and its availability in dissolved inorganic form (ISA, Appendix 9, p. 9–28; Davis et al., 2015; Gobler et al., 2016).

The relative contribution of N deposition to total N loading varies among waterbodies. For example, atmospheric deposition is generally considered to be the main source of N inputs to most headwater stream, high-elevation lake, and low-order stream watersheds that are far from the influence of other N sources like agricultural runoff and wastewater effluent (ISA, section ES5.2). In other fresh waterbodies, however, agricultural practices and point source discharges have been estimated to be larger contributors to total N loading (ISA, Appendix 7, section 7.1.1.1). Since the 2008 ISA, several long-term monitoring studies in the Appalachian Mountains, the Adirondacks, and the Rocky Mountains have reported temporal patterns of declines in surface water NO_3^- concentration corresponding to declines in atmospheric N deposition (ISA, Appendix 9, section 9.1.1.2). Declines in basin wide NO_3^- concentrations have also been reported for the nontidal Potomac River watershed and have been attributed to declines in atmospheric N deposition (ISA, Appendix 7, section 7.1.5.1).

Nutrient inputs to coastal and estuarine waters are important influences on the health of these waterbodies. Continued inputs of N, the most common limiting nutrient in estuarine and coastal systems, have resulted in N over-enrichment and subsequent alterations to the nutrient balance in these systems (ISA, Appendix 10, p. 10–6). For example, the rate of N delivery to coastal waters is strongly correlated to changes in primary production and phytoplankton biomass (ISA, Appendix 10, section 10.1.3). Algal blooms and associated die-offs can contribute to hypoxic conditions (most common during summer months), which can contribute to fish kills and associated reductions in marine populations (ISA, Appendix 10). Further, the prevalence and health of submerged aquatic vegetation (SAV), which is important habitat for many aquatic species, has been identified as a biological indicator for N enrichment in estuarine waters (ISA, Appendix 10, section 10.2.5). Previously available evidence indicated the role of N loading in SAV declines in multiple U.S. estuaries through increased production of macroalgae or other algae, which reduce sunlight penetration into shallow waters where SAV is found (ISA, Appendix 10, section 10.2.3). Newly available studies have reported findings of increased SAV populations in two tributaries of the Chesapeake Bay corresponding to reduction in total N loading from all sources since 1990 (ISA, Appendix 10, section 10.2.5). The newly available studies also identify other factors threatening SAV, including increasing temperature related to climate change (ISA, Appendix 10, section 10.2.5).

The degree to which N enrichment and associated ecosystem impacts are driven by atmospheric N deposition varies greatly and is largely unique to the specific ecosystem. Analyses based on data across two to three decades

extending from the 1990s through about 2010 estimate that most of the analyzed estuaries receive 15–40% of their N inputs from atmospheric sources (ISA, section ES 5.2; ISA, Appendix 7, section 7.2.1), though for specific estuaries contributions can vary more widely. In areas along the West Coast, N sources may include coastal upwelling from oceanic waters, as well as transport from watersheds. Common N inputs to estuaries include those associated with freshwater inflows transporting N from agriculture, urban, and wastewater sources, in addition to atmospheric deposition across the watershed (ISA, section IS 2.2.2; ISA, Appendix 7, section 7.2.1).

There are estimates of atmospheric N loading to estuaries available from several recent modeling studies (ISA, Table 7–9). One analysis of estuaries along the Atlantic Coast and the Gulf of Mexico, which estimated that 62–81% of N delivered to the eastern U.S. coastal zone is anthropogenic in source, also reported that atmospheric N deposition to freshwater that is subsequently transported to estuaries represents 17–21% of the total N loading into the coastal zone (McCrackin et al., 2013; Moore et al., 2011). In the Gulf of Mexico, 26% of the N transported to the Gulf in the Mississippi/Atchafalaya River basin was estimated to be contributed from atmospheric deposition (which may include volatilized losses from natural, urban, and agricultural sources) (Robertson and Saad, 2013). Another modeling analysis identified atmospheric deposition to watersheds as the dominant source of N to the estuaries of the Connecticut, Kennebec, and Penobscot rivers. For the entire Northeast and mid-Atlantic coastal region, however, it was the third largest source (20%), following agriculture (37%) and sewage and population-related sources (28%) (ISA, Appendix 7, section 7.2.1). Estimates for West Coast estuaries indicate much smaller contribution from atmospheric deposition. For example, analyses for Yaquina Bay, Oregon, estimated direct deposition to contribute only 0.03% of N inputs; estimated N input to the watershed from N fixing red alder (*Alnus rubra*) trees was a much larger (8%) source (ISA, Appendix 7, section 7.2.1; Brown and Ozretich, 2009).

Evidence in coastal waters has recognized a role of nutrient enrichment in acidification of some coastal waters (ISA, Appendix 10, section 10.5). More specifically, nutrient-driven algal blooms may contribute to ocean acidification, possibly through increased decomposition, which lowers dissolved oxygen levels in the water column and contributes to lower pH. Such nutrient-enhanced acidification can also be exacerbated by warming (associated with increased microbial respiration) and changes in buffering capacity (alkalinity) of freshwater inputs (ISA, Appendix 10, section 10.5).

(2) Terrestrial Ecosystems

It is long established that N enrichment of terrestrial ecosystems increases plant productivity (ISA, Appendix 6, section 6.1). Building on this, the currently available evidence, including evidence that is longstanding, is sufficient to infer a causal relationship between N deposition and the alteration of the physiology and growth of terrestrial organisms and the productivity of terrestrial ecosystems (ISA, Appendix 5, section 5.2 and Appendix 6, section 6.2). Responsive ecosystems include those that are N limited and/or contain species that have evolved in nutrient-poor environments. In these ecosystems the N-enrichment changes in plant physiology and growth rates vary among species, with species that are adapted to low N supply being readily outcompeted by species that require more N. In this manner, the relative representation of different vegetation species may be altered, and some species may be eliminated altogether, such that community composition is changed and species diversity declines (ISA, Appendix 6, sections 6.3.2 and 6.3.8). The currently available evidence in this area is sufficient to infer a causal relationship between N deposition and the alteration of species richness, community composition, and biodiversity in terrestrial ecosystems (ISA, section IS.5.3 and Appendix 6, section 6.3).

Previously available evidence described the role of N deposition in changing soil carbon and N pools and fluxes, as well as altering plant and microbial growth and physiology in an array of terrestrial ecosystems (ISA, Appendix 6, section 6.2.1). Nitrogen availability is broadly limiting for productivity in many terrestrial ecosystems (ISA, Appendix 6, section 6.2.1). Accordingly, N additions contribute to increased productivity and can alter biodiversity. Eutrophication, one of the mechanisms by which increased productivity and changes in biodiversity associated with N addition to terrestrial ecosystems can occur, comprises multiple effects that include changes to the physiology of individual organisms, alteration of the relative growth and abundance of various species, transformation of relationships between species, and indirect effects on availability of essential resources other than N, such as light, water, and nutrients (ISA, Appendix 6, section 6.2.1).

The currently available evidence for the terrestrial ecosystem effects of N enrichment, including eutrophication, includes studies in a wide array of systems, including forests (tropical, temperate, and boreal), grasslands, arid and semi-arid scrublands, and tundra (PA, section 4.1; ISA, Appendix 6). The organisms affected include trees, herbs and shrubs, and lichen, as well as fungal, microbial, and arthropod communities. Lichen communities, which have important roles in hydrologic cycling, nutrient cycling, and as sources of food and habitat for other species, are also affected by atmospheric N (PA, section 4.1; ISA, Appendix 6). The recently available studies on the biological effects of added N in terrestrial ecosystems include investigations of plant and microbial physiology, long-term ecosystem-scale N addition experiments, regional and continental-scale monitoring studies, and syntheses.

The previously available evidence included N addition studies in the U.S. and N deposition gradient studies in Europe that reported associations of N deposition with reduced species richness and altered community composition for grassland plants, forest understory plants, and mycorrhizal fungi (soil fungi that have a symbiotic relationship with plant roots) (ISA, Appendix 6, section 6.3). New evidence for forest communities in this review indicates that N deposition alters the physiology and growth of overstory trees, and that N deposition has the potential to change the community composition of forests (ISA, Appendix 6, section 6.6). Recent studies on forest trees include analyses of long-term forest inventory data collected from across the U.S. and Europe (ISA, Appendix 6, section 6.2.3.1). The recent evidence also includes findings of variation in forest understory and non-forest plant communities with atmospheric N deposition gradients in the U.S. and in Europe. For example, gradient studies in Europe have found higher N deposition to be associated with forest understory plant communities with more nutrient-demanding and shade-tolerant plant species (ISA, Appendix 6, section 6.3.3.2). A recent gradient study in the U.S. found associations between herb and shrub species richness and N deposition, that were highly dependent on soil pH (ISA, Appendix 6, section 6.3.3.2).

Recent evidence includes associations of variation in lichen community

composition with N deposition gradients in the U.S. and Europe, (ISA, Appendix 6, section 6.3.7; Table 6–23). Differences in lichen community composition have been attributed to atmospheric N pollution in forests throughout the West Coast, in the Rocky Mountains, and in southeastern Alaska. Differences in epiphytic lichen growth or physiology have been observed along atmospheric N deposition gradients in the highly impacted area of southern California, and also in more remote locations such as Wyoming and southeastern Alaska (ISA, Appendix 6, section 6.3.7). Historical deposition may play a role in observational studies of N deposition effects, complicating the disentangling of responses that may be related to more recent N loading.

Newly available findings from N addition experiments expand on the understanding of mechanisms linking changes in plant and microbial community composition to increased N availability. Such experiments in arid and semi-arid environments indicate that competition for resources such as water may exacerbate the effects of N addition on diversity (ISA, Appendix 6, section 6.2.6). The newly available evidence includes studies in arid and semiarid ecosystems, particularly in southern California, that have reported changes in plant community composition, in the context of a long history of significant N deposition, with fewer observations of plant species loss or changes in plant diversity (ISA, Appendix 6, section 6.3.6).

Nitrogen limitation in grasslands and the dominance by fast-growing species that can shift in abundance rapidly (in contrast to forest trees) contribute to an increased sensitivity of grassland ecosystems to N inputs (ISA, Appendix 6, section 6.3.6). Studies in southern California coastal sage scrub communities, including studies of the long-term history of N deposition, which was appreciably greater in the past than recent rates, indicate impacts on community composition and species richness in these ecosystems (ISA, Appendix 6, sections 6.2.6 and 6.3.6). In summary, the ability of atmospheric N deposition to override the natural spatial heterogeneity in N availability in arid ecosystems, such as the Mojave Desert and California coastal sage scrub ecosystems in southern California, makes these ecosystems sensitive to N deposition (ISA, Appendix 6, section 6.3.8).

The current evidence includes relatively few studies of N enrichment recovery in terrestrial ecosystems. Among N addition studies assessing responses after cessation of additions, it has been observed that soil nitrate and ammonium concentrations recovered to levels observed in untreated controls within 1 to 3 years of the cessation of additions, but soil processes such as N mineralization and litter decomposition were slower to recover (ISA, Appendix 6, section 6.3.2; Stevens, 2016). A range of recovery times have been reported for mycorrhizal community composition and abundance from a few years in some systems to as long as 28 or 48 years in others (ISA, Appendix 6, section 6.3.2; Stevens, 2016; Emmett et al., 1998; Strengbom et al., 2001). An N addition study in the midwestern U.S. observed that plant physiological processes recovered in less than 2 years, although grassland communities were slower to recover and still differed from controls 20 years after the cessation of N additions (ISA, Appendix 6, section 6.3.2; Isbell et al., 2013).

d. Other Deposition-Related Effects

Additional categories of effects for which the current evidence is sufficient to infer causal relationships with deposition of S or N compounds or PM include changes in mercury methylation processes in freshwater ecosystems, changes in aquatic biota due to sulfide phytotoxicity, and ecological effects from PM deposition (ISA, Table IS–1). The current evidence, including that newly available in this review, is sufficient to infer a causal relationship between S deposition and the alteration of mercury methylation in surface water, sediment, and soils in wetland and freshwater ecosystems. The process of mercury methylation is influenced in part by surface water SO_4^{2-} concentrations, as well as the presence of mercury. Accordingly, in waterbodies where mercury is present, S deposition, particularly that associated with SO_X, has a role in production of methylmercury, which contributes to methylmercury accumulation in fish (ISA, Appendix 12, section 12.8). Newly available evidence has improved our scientific understanding of the types of organisms involved in the methylation process, as well as the environments in which they are found, and factors that influence the process, such as oxygen content, temperature, pH, and carbon supply, which themselves vary temporally, seasonally, and geographically (ISA, Appendix 12, section 12.3). The currently available evidence is also sufficient to infer a new causal relationship between S deposition and changes in biota due to sulfide phytotoxicity, including alteration of growth and productivity, species physiology, species richness, community composition, and biodiversity in wetland and freshwater ecosystems (ISA, section IS.9). Sulfur deposition can contribute to sulfide and associated phytotoxicity in freshwater wetlands and lakes, with the potential to contribute to effects on plant community composition in freshwater wetlands (ISA, Appendix 12, section 12.2.3).

With regard to PM deposition, the currently available evidence is sufficient to infer a likely causal relationship between deposition of PM and a variety of effects on individual organisms and ecosystems (ISA, Appendix 15, section 15.1). Particulate matter includes a heterogeneous mixture of particles differing in origin, size, and chemical composition. In addition to N and S and their transformation products, other PM components, such as trace metals and organic compounds, when deposited to ecosystems, may affect biota. Material deposited onto leaf surfaces can alter leaf processes and PM components deposited to soils and waterbodies may be taken up into biota, with the potential for effects on biological and ecosystem processes. Studies involving ambient air PM, however, have generally involved conditions that would not be expected to meet the current secondary standards for PM. Further, although in some limited cases, effects have been attributed to particle size (*e.g.,* soiling of leaves by large coarse particles near industrial facilities or unpaved roads), ecological effects of PM have been largely attributed more to its chemical components, such as trace metals, which can be toxic in large amounts (ISA, Appendix 15, sections 15.2 and 15.3.1). The evidence largely comes from studies involving areas experiencing elevated concentrations of PM, such as near industrial areas or historically polluted cities (ISA, Appendix 15, section 15.4).

2. Public Welfare Implications

The public welfare implications of the evidence regarding S and N related welfare effects are dependent on the type and severity of the effects, as well as the extent of the effect at a particular biological or ecological level of organization or spatial scale. We discuss such factors here in light of judgments and conclusions regarding effects on the public welfare that have been made in NAAQS reviews.

As provided in section 109(b)(2) of the CAA, the secondary standard is to ''specify a level of air quality the attainment and maintenance of which in the judgment of the Administrator . . . is requisite to protect the public welfare from any known or anticipated adverse effects associated with the presence of

such air pollutant in the ambient air.'' The secondary standard is not meant to protect against all known or anticipated welfare effects related to oxides of N and S, and particulate matter, but rather those that are judged to be adverse to the public welfare, and a bright-line determination of adversity is not required in judging what is requisite (78 FR 3212, January 15, 2013; 80 FR 65376, October 26, 2015; see also 73 FR 16496, March 27, 2008). Thus, the level of protection from known or anticipated adverse effects to public welfare that is requisite for the secondary standard is a public welfare policy judgment made by the Administrator. The Administrator's judgment regarding the available information and adequacy of protection provided by an existing standard is generally informed by considerations in prior reviews and associated conclusions.

The categories of effects identified in the CAA to be included among welfare effects are quite diverse, and among these categories, any single category includes many different types of effects that are of broadly varying specificity and level of resolution. For example, effects on vegetation and effects on animals are categories identified in CAA section 302(h), and the ISA recognizes effects of N and S deposition at the organism, population, community, and ecosystem level, as summarized in section II.C.1 above (ISA, sections IS.5 to IS.9). As noted in the last review of the secondary NAAQS for NO_X and SO_X, while the CAA section 302(h) lists a number of welfare effects, ''these effects do not define public welfare in and of themselves'' (77 FR 20232, April 3, 2012).

The significance of each type of effect with regard to potential effects on the public welfare depends on the type and severity of effects, as well as the extent of such effects on the affected environmental entity, and on the societal use of the affected entity and the entity's significance to the public welfare. Such factors have been considered in the context of judgments and conclusions made in some prior reviews regarding public welfare effects. For example, in the context of secondary NAAQS decisions for ozone (O_3), judgments regarding public welfare significance have given particular attention to effects in areas with special Federal protections (such as Class I areas), and lands set aside by States, Tribes and public interest groups to provide similar benefits to the public welfare (73 FR 16496, March 27, 2008; 80 FR 65292, October 26, 2015).[34] In the 2015 O_3 NAAQS review, the EPA recognized the ''clear public interest in and value of maintaining these areas in a condition that does not impair their intended use and the fact that many of these lands contain O_3 − sensitive species'' (73 FR 16496, March 27, 2008).

Judgments regarding effects on the public welfare can depend on the intended use for, or service (and value) of, the affected vegetation, ecological receptors, ecosystems and resources and the significance of that use to the public welfare (73 FR 16496, March 27, 2008: 80 FR 65377, October 26, 2015). Uses or services provided by areas that have been afforded special protection can flow in part or entirely from the vegetation that grows there or other natural resources. Ecosystem services range from those directly related to the natural functioning of the ecosystem to ecosystem uses for human recreation or profit, such as through the production of lumber or fuel (Constanza et al., 2017; ISA, section IS.13). The spatial, temporal, and social dimensions of public welfare impacts are also influenced by the type of service affected. For example, a national park can provide direct recreational services to the thousands of visitors that come each year, but also provide an indirect value to the millions who may not visit but receive satisfaction from knowing it exists and is preserved for the future (80 FR 65377, October 26, 2015).

In the last review of the secondary NAAQS for NO_X and SO_X, ecosystem services were discussed as a method of assessing the magnitude and significance to the public of resources affected by ambient air concentrations of oxides of nitrogen and sulfur and associated deposition in sensitive ecosystems (77 FR 20232, April 3, 2012). That review recognized that although there is no specific definition of adversity to public welfare, one paradigm might involve ascribing public welfare significance to disruptions in ecosystem structure and function. The concept of considering the extent to which a pollutant effect will contribute to such disruptions has been used broadly by the EPA in considering effects. An evaluation of adversity to public welfare might also consider the likelihood, type, magnitude, and spatial scale of the effect, as well as the potential for recovery and any uncertainties relating to these considerations (77 FR 20218, April 3, 2012).

The types of effects on aquatic and terrestrial ecosystems discussed in section II.C.1 above differ with regard to aspects important to judging their public welfare significance. For example, in the case of effects on timber harvest, such judgments may consider aspects such as the heavy management of silviculture in the U.S., while judgments for other categories of effects may generally relate to considerations regarding natural areas, including specifically those areas that are not managed for harvest. For example, effects on tree growth and survival have the potential to be significant to the public welfare through impacts in Class I and other areas given special protection in their natural/existing state, although they differ in how they might be significant.

In this context, it may be important to consider that S and N deposition-related effects, such as changes in growth and survival of plant and animal species, could, depending on severity, extent, and other factors, lead to effects on a larger scale including changes in overall productivity and altered community composition (ISA, section IS.2.2.1 and Appendices 5, 6, 8, 9, and 10). Further, effects on individual species could contribute to impacts on community composition through effects on growth and reproductive success of sensitive species in the community, with varying impacts to the system through many factors including changes to competitive interactions (ISA, section IS.5.2 and Appendix 6, section 6.3.2).

In acid-impacted surface waters, acidification primarily affects the diversity and abundance of fish and other aquatic life, and the ecosystem services derived from these organisms. (2011 PA, section 4.4.5). In addition to other types of services, fresh surface waters support several cultural services, such as aesthetic, recreational, and educational services. The type of service that is likely to be most widely and significantly affected by aquatic

[34] For example, the fundamental purpose of parks in the National Park System ''is to conserve the scenery, natural and historic objects, and wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wildlife in such manner and by such means as will leave them unimpaired for the enjoyment of future generations'' (54 U.S.C. 100101). Additionally, the Wilderness Act of 1964 defines designated ''wilderness areas'' in part as areas ''protected and managed so as to preserve [their] natural conditions'' and requires that these areas ''shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, [and] the preservation of their wilderness character . . .'' (16 U.S.C. 1131 (a) and (c)). Other lands that benefit the public welfare include national forests which are managed for multiple uses including sustained yield management in accordance with land management plans (see 16 U.S.C. 1600(1)–(3); 16 U.S.C. 1601(d)(1)).

acidification is recreational fishing. Multiple studies have documented the economic benefits of recreational fishing. Freshwater rivers and lakes of the northeastern United States, surface waters that have been most affected by acidification, are not a major source of commercially raised or caught fish; they are, however, a source of food for some recreational and subsistence fishers and for other consumers (2009 REA, section 4.2.1.3). It is not known if and how consumption patterns of these fishers may have been affected by the historical impacts of surface water acidification in the affected systems. Non-use services, which include existence (protection and preservation with no expectation of direct use) and bequest values, are arguably a significant source of benefits from reduced acidification (Banzhaf et al., 2006). Since the 2012 review, additional approaches and methods have been applied to estimate the potential effects of aquatic acidification on uses and services of affected aquatic ecosystems; with regard to economic impacts, however, ''for many regions and specific services, poorly characterized dose-response between deposition, ecological effect, and services are the greatest challenge in developing specific data on the economic benefits of emission reductions'' (ISA, Appendix 14, p. 14–23).

Nitrogen loading in aquatic ecosystems, particularly large estuarine and coastal water bodies, has and continues to pose risks to the services provided by those ecosystems, with clear implications to the public welfare (2011 PA, section 4.4.2; ISA, Appendix 14, section 14.3.2). For example, the large estuaries of the eastern U.S. are an important source of fish and shellfish production, capable of supporting large stocks of resident commercial species and serving as breeding grounds and interim habitat for several migratory species (2009 REA, section 5.2.1.3). These estuaries also provide an important and substantial variety of cultural ecosystem services, including water-based recreational and aesthetic services. And as noted for fresh waters above, these systems have non-use benefits to the public (2011 PA, section 4.4.5). Studies reviewed in the ISA have explored both enumeration of the number of ecosystem services that may be affected by N loading, and the pathways by which this may occur, as well as approaches to valuation of such impacts. A finding of one such analysis was that ''better quantitative relationships need to be established between N and the effects on ecosystems at smaller scales, including a better understanding of how N shortages can affect certain populations'' (ISA, Appendix 14, sections 14.5 and 14.6). The relative contribution of atmospheric deposition to total N loading varies widely among estuaries, however, and has declined in more recent years (ISA, Appendix 10, section 10.10.1).

A complication to consideration of public welfare implications that is specific to N deposition in terrestrial systems is its potential to increase growth and yield of plants, that may be agricultural and forest crops. Such increased growth and yield may be judged and valued differently than changes in growth of other species. As noted in section II.C.1 above, enrichment in natural ecosystems can, by increasing growth of N limited plant species, change competitive advantages of species in a community, with associated impacts on the composition of the ecosystem's plant community. The public welfare implications of such effects may vary depending on their severity, prevalence, or magnitude, such as with only those rising to a particular severity (*e.g.,* with associated significant impact on key ecosystem functions or other services), magnitude or prevalence considered of public welfare significance. Impacts on some of these characteristics (*e.g.,* forest or forest community composition) may be considered of greater public welfare significance when occurring in Class I or other protected areas, due to the value that the public places on such areas. In considering such services in past reviews for secondary standards for other pollutants (*e.g.,* O_3), the Agency has given particular attention to effects in natural ecosystems, indicating that a protective standard, based on consideration of effects in natural ecosystems in areas afforded special protection, would also ''provide a level of protection for other vegetation that is used by the public and potentially affected by O_3 including timber, produce grown for consumption and horticultural plants used for landscaping'' (80 FR 65403, October 26, 2015).

Although more sensitive effects are described with increasingly greater frequency in the evidence base of effects related to ecosystem deposition of N and S compounds, the available information does not yet provide a framework that can specifically tie various magnitudes or prevalences of changes in a biological or ecological indicator (*e.g.,* lichen abundance or community composition [35]) to broader effects on the public welfare. The ISA finds that while there is an improved understanding from information available in this review of the number of pathways by which N and S deposition may affect ecosystem services, most of these relationships remain to be quantified (ISA, Appendix 14, section 14.6).[36] This gap creates uncertainties when considering the public welfare implications of some biological or geochemical responses to ecosystem acidification or N enrichment, and accordingly complicates judgments on the potential for public welfare significance. That notwithstanding, while shifts in species abundance or composition of various ecological communities may not be easily judged with regard to public welfare significance, at some level, such changes, especially if occurring broadly in specially protected areas, where the public can be expected to place high value, might reasonably be concluded to impact the public welfare. An additional complexity in the current review with regard to assessment of effects associated with existing deposition rates is that the current, much-improved air quality and associated reduced deposition is within the context of a longer history that included appreciably greater deposition in the middle of the last century, the environmental impacts of which may remain, affecting ecosystem responses.

In summary, several considerations are recognized as important to judgments on the public welfare significance of the array of welfare effects at different exposure conditions. These include uncertainties and limitations that must be taken into account regarding the magnitude of key effects that might be concluded to be adverse to ecosystem health and associated services. Additionally, there are numerous locations vulnerable to public welfare impacts from S or N deposition-related effects on terrestrial and aquatic ecosystems and their associated services. Other important considerations include the exposure circumstances that may elicit effects and

[35] As recognized in section II.C.1.c above, lichen communities have important roles in ecosystem function, such as in hydrologic cycling, nutrient cycling, and as sources of food and habitat for other species (ISA, appendix 6).

[36] While ''there is evidence that N and S emissions/deposition have a range of effects on U.S. ecosystem services and their social value'' and ''there are some economic studies that demonstrate such effects in broad terms,'' ''it remains methodologically difficult to derive economic costs and benefits associated with specific regulatory decisions/standards'' (ISA, appendix 14, pp. 14–23 to 14–24).

the potential for the significance of the effects to vary in specific situations due to differences in sensitivity of the exposed species, the severity and associated significance of the observed or predicted effect, the role that the species plays in the ecosystem, the intended use of the affected species and its associated ecosystem and services, the presence of other co-occurring predisposing or mitigating factors, and associated uncertainties and limitations.

3. Exposure Conditions and Deposition-Related Metrics

The ecological effects identified in section II.C.1 above vary widely with regard to the extent and level of detail of the available information that describes the exposure circumstances that may elicit them. The information for direct effects of SO_X, N oxides and PM in ambient air is somewhat more straight-forward to consider as it is generally in terms of concentrations in air. For deposition-related effects, the information may be about S and N compounds in soil or water or may be for metrics intended to represent atmospheric deposition of those compounds. For the latter, as recognized in section II.A.3 above, we face the challenge of relating that information to patterns of ambient air concentrations.

With regard to the more complex consideration of deposition-related effects such as ecosystem acidification and N enrichment, there is also wide variation in the extent and level of detail of the evidence available to describe the ecosystem characteristics (*e.g.,* physical, chemical, and geological characteristics, as well as atmospheric deposition history) that influence the degree to which deposition of N and S associated with the oxides of S and N and PM in ambient air elicit ecological effects. One reason for this relates to the contribution of many decades of uncontrolled atmospheric deposition before the establishment of NAAQS for PM, oxides of S and oxides of N (in 1971), followed by the subsequent decades of continued deposition as standards were implemented and updated. The impacts of this deposition history remain in soils of many parts of the U.S. today (*e.g.,* in the Northeast and portions of the Appalachian Mountains in both hardwood and coniferous forests, as well as areas in and near the Los Angeles Basin), with recent signs of recovery in some areas (ISA, Appendix 4, section 4.6.1; 2008 ISA, section 3.2.1.1). This backdrop and associated site-specific characteristics are among the challenges faced in identifying deposition targets that might be expected to provide protection going forward against the array of effects for which we have evidence of occurrence in sensitive ecosystems as a result of the deposition of the past.

Critical loads (CLs) are frequently used in studies that investigate associations between various chemical, biological, ecological and ecosystem characteristics and a variety of N or S deposition-related metrics. The term critical load, which in general terms refers to an amount (or a rate of addition) of a pollutant to an ecosystem that is estimated to be at (or just below) that which would result in an ecological effect of interest, has multiple interpretations and applications (ISA, p. IS–14). The dynamic nature of ecosystem pollutant processing and the broad array of factors that influence it adds complications to critical load identification and interpretation. Time is an important dimension, which is sometimes unstated, (*e.g.,* in empirical or observational analyses) and is sometimes explicit (*e.g.,* in steady-state or dynamic modeling analyses) (ISA, section IS.2.2.4). Further, this variety in meanings stems in part from differing judgments and associated identifications regarding the ecological effect (both type and level of severity) on which the critical load focuses, and judgment of its significance or meaning.

Studies, based on which CLs are often identified, vary widely with regard to the specific ecosystem characteristics being evaluated (or judged), as well as the benchmarks selected for judging them, such as the deposition-related metrics, their scope, method of estimation and time period. The specific details of these various factors influence the strengths and limitations, and associated uncertainty, of using critical load information from such studies for different applications. The summary that follows is intended to reach beyond individual critical loads developed over a variety of studies and ecosystems and consider the underlying study findings with regard to key aspects of the environmental conditions and ecological characteristics studied. A more quantitative variation of this is the methodology developed for the aquatic acidification REA in this review, presented in the PA and summarized in section II.D below. In those analyses, the concept of a critical load is employed with steady-state modeling that relates deposition to waterbody acid neutralizing capacity.

While recognizing the inherent connections between watersheds and waterbodies, such as lakes and streams, the organization of this section recognizes the more established state of the information, tools, and data for aquatic ecosystems for characterizing relationships between atmospheric deposition and acidification and/or nutrient enrichment effects under air quality associated with the current standards (PA, Chapter 5). Further, we recognize the generally greater role of atmospheric deposition in waterbodies impacted by aquatic acidification compared to its role in eutrophication-related impacts of surface waters, particularly rivers and estuaries in and downstream of populated watersheds, to which direct discharges have also long contributed, as recognized in section II.C.1.c(1) above (ISA, Appendix 13, section 13.1.3.1; ISA, Appendix 7, section 7.1.1.1; 2008 ISA, section 3.2). Therefore, with regard to deposition-related effects, we focus first on the quantitative information for aquatic ecosystem effects in sections II.C.3.a. Section II.C.3.b discusses the available evidence regarding relationships between deposition-related exposures and the occurrence and severity of effects on trees and understory communities in terrestrial ecosystems. Section II.C.3.c discusses the currently available information related to consideration of exposure concentrations associated with other welfare effects of nitrogen and sulfur oxides and PM in ambient air.

a. Acidification and Nitrogen Enrichment in Aquatic Ecosystems

Prior to the peak in S deposition levels that occurred in the 1970s and early 1980s, surface water sulfate concentrations were increasing in response to the extremely high S deposition of the preceding years. Subsequently, and especially more recently, surface water sulfate concentrations have generally decreased, particularly in the Northeast (Robinson et al., 2008; ISA, section 7.1.5.1.4). Some studies of long-term projections in some waterbodies (*e.g.,* in the Blue Ridge Mountains region in Virginia), however, continue to indicate little or slow reduction in acidic ions, even as emissions have declined. This is an example of the competing role of changes in S adsorption on soils and the release of historically deposited S from soils into surface water,[37] which some modeling has suggested will delay chemical recovery in those water bodies (ISA, Appendix 7, sections 7.1.2.2 and 7.1.5.1).

[37] Some modeling studies in some areas have indicated the potential for a lagged response even as emissions and deposition decline; this lag reflects a reduction in soil absorption of SO_4^{-2} and leaching of previously accumulated S from watersheds (ISA, appendix 7, section 7.1.2.2).

In the 2012 review of the oxides of N and S, quantitative analyses relating deposition in recent times (*e.g.,* since 2000) to ecosystem acidification, and particularly aquatic acidification, were generally considered to be less uncertain, and the ability of those analyses to inform NAAQS policy judgments more robust, than analyses related to deposition and ecosystem nutrient enrichment or eutrophication (2011 PA). While quantitative assessment approaches for aquatic eutrophication as a result of total N loading are also well established, and the evidence base regarding atmospheric deposition and nutrient enrichment has expanded since the 2012 review, the significance of non-air N loading to rivers, estuaries and coastal waters (as recognized in section II.C.1 above) continues to complicate the assessment of nutrient enrichment-related risks specifically related to atmospheric N deposition. Accordingly, the REA analyses developed in this review focus on aquatic acidification. The REA and its findings regarding deposition rates associated with different levels of aquatic acidification risk are summarized in section II.D below. Thus, the paragraphs below focus on the available quantitative information regarding atmospheric deposition and N enrichment in aquatic ecosystems.

There are several other categories of effects to aquatic ecosystems from deposition of nitrogen and sulfur for which there is significant scientific evidence, based on which the ISA has made determinations of causality; these include N enrichment in various types of aquatic systems, including freshwater streams and lakes, estuarine and near-coastal systems, and wetlands, as described in section II.C.1 above.[38] Separate quantitative analyses have not been performed in this review for N enrichment-related effects in these waterbodies in recognition of a number of factors, including modeling and assessment complexities, and site- or waterbody-specific data requirements, as well as, in some cases, issues of apportionment of atmospheric sources separate from other influential sources. Rather, we have reviewed the evidence as characterized in the ISA with regard to deposition level estimates that studies have related to various degrees of different effects with associated differences in potential for or clarity in public welfare significance. The overview provided here draws on the summary in the PA (PA, section 5.2).

The eutrophication of wetlands and other aquatic systems is primarily associated with nitrogen inputs whether from deposition or other sources. The ranges of deposition associated with these effects is very broad and ranges from levels on the order of a few kg N/ha-yr for impacts to diatom communities in high elevation lakes to over 500 kg N/ha-yr for some effects of interest in some wetland N addition studies. While the information available on these types of impacts is sufficient for causal determinations, it is often very localized and less informative for other uses, such as for the purpose of quantitative assessment relating deposition to waterbody response at an array of U.S. locations. Accordingly, in this review, this information was considered from a more descriptive perspective in characterizing conditions reported in the evidence as associated with various effects described in section II.C.1 above.

There is also considerable information available for estuaries and coastal systems. The relationship between N loading and algal blooms, and associated water quality impacts, has led to numerous water quality modeling projects, over the past few decades, that have quantified eutrophication processes in multiple estuaries, near coastal marine ecosystems and large river systems, to relate N loading to various water quality indicators to inform water quality management decision-making in multiple estuaries, including Chesapeake Bay, Narraganset Bay, Tampa Bay, Neuse River Estuary and Waquoit Bay (ISA, Appendix 7, section 7.2). These projects often use indicators of nutrient enrichment, such as chlorophyll a, dissolved oxygen, and reduced abundance of submerged aquatic vegetation, among others (ISA, section IS.7.3 and Appendix 10, section 10.6). For these estuaries, the available information regarding atmospheric deposition and the establishment of associated target loads varies across the various estuaries (ISA, Appendix 7, Table 7–9).

While a focus is identification of total N loading targets for purposes of attaining water quality standards for such indicators, the modeling work also includes apportionment of sources, which vary by system. The assignment of targets to different source types (*e.g.,* groundwater, surface water runoff, and atmospheric deposition) in different waterbodies and watersheds also varies for both practical and policy reasons. Further, during the multi-decade time period across which these activities have occurred, atmospheric deposition of N in coastal areas has declined. In general, however, atmospheric deposition targets for N for the large systems summarized above have been on the order of 10 kg/ha-yr, with some somewhat lower and some somewhat higher.

The establishment of target N loads to surface waterbodies is in many areas related to implementation of the total maximum daily load (TMDL) requirements of section 303(d) of the Clean Water Act (CWA).[39] Nutrient load allocation and reduction activities in some large estuaries predate development of CWA 303(d) TMDLs. The multiple Chesapeake Bay Agreements signed by the U.S. EPA, District of Columbia, and States of Virginia, Maryland, and Pennsylvania first established the voluntary government partnership that directs and manages bay cleanup efforts and subsequently included commitments for reduction of N and phosphorus loading to the bay. Efforts prior to 2000 focused largely on point-source discharges, with slower progress for nonpoint-source reductions via strategies such as adoption of better agricultural practices, reduction of atmospheric N deposition, enhancement of wetlands and other nutrient sinks, and control of urban sprawl (2008 ISA, section 3.3.8.3). Studies since 2000 estimate atmospheric deposition as a major N source in the overall N budget for Chesapeake Bay[40] (ISA, section 7.2.1; Howarth, 2008; Boyer et al., 2002). The TMDL established for Chesapeake Bay in 2010, under requirements of section 303(d) of the Clean Water Act, included a loading allocation for atmospheric deposition of N directly to tidal waters, which was projected to be achieved by 2020 based on air quality progress under existing Clean Air Act regulations and programs (U.S. EPA, 2010).[41]

[38] Two other categories of effects assessed in the ISA (and for which causal determinations are made) are mercury methylation and sulfide toxicity (ISA, appendix 12). While the evidence was sufficient to support causal determinations between S deposition and these effects, quantitative information to support quantitative analysis in this review.

[39] Under the CWA, section 303(d), every two years, states and other jurisdictions are required to list impaired waterbodies not meeting water quality standards. For waterbodies on the list, a TMDL must be developed that identifies the maximum amount of pollutant a waterbody can receive and still meet water quality standards, *e.g.,* standards for dissolved oxygen and chlorophyll a (which are indicators of eutrophication).

[40] For example, a 2011 analysis estimated atmospheric deposition to the Chesapeake Bay watershed to account for approximately 25% of total N inputs to the estuary (ISA, Appendix 7, section 7.2.1).

[41] As recognized on the EPA web page describing this activity, the TMDL, formally established in December 2010 ''is designed to ensure that all pollution control measures needed to fully restore the Bay and its tidal rivers are in place by 2025.''

Continued

Jurisdictions for other U.S. estuaries have also developed TMDLs to address nutrient loading causing eutrophication. For example, atmospheric deposition in 2000 was identified as the third largest source of N loading to Narragansett Bay via the watershed and directly to the Bay, at 20% of the total (ISA, Appendix 7, section 7.2.1). Similarly, atmospheric deposition was estimated to account for approximately a third of N input to several small- to medium-sized estuaries of southern New England, with the percentage varying widely for individual estuaries (ISA, Appendix 7, section 7.2.1; Latimer and Charpentier, 2010).[42] Another modeling study in the Waquoit Bay estuaries in Cape Cod, Massachusetts, using data since 1990, estimated atmospheric deposition to have decreased by about 41% while wastewater inputs increased 80%, with a net result that total loads were concluded to not have changed over that time period (ISA, Appendix 7, section 7.2.1). Another well-studied estuarine system is Tampa Bay, for which a 2013 study estimated atmospheric sources to account for more than 70% of total N loading based on 2002 data (ISA, Appendix 7, section 7.2.1). The TMDL for Tampa Bay allocates 11.8 kg/ha-yr N loading to atmospheric deposition (ISA, Appendix 16, section 16.4.2; Janicki Environmental, 2013). The Neuse River Estuary is another for which modeling work has investigated the role of N loading from multiple sources on nutrient enrichment[43] and associated water quality indicators, including chlorophyll a (ISA, Appendix 10, section 10.2).

Nitrogen loading to estuaries has also been considered specifically with regard to impacts on submerged aquatic vegetation. For example, eelgrass coverage was estimated to be markedly reduced in shallow New England estuaries with N loading at or above 100 kg N/ha-yr (ISA, Appendix 10, section 10.2.5). Another study estimated loading rates above 50 kg/ha-yr as a threshold at which habitat extent may be impacted (ISA, Appendix 10, section 10.2.5; Latimer and Rego, 2010). Factors that influence the impact of N loading on submerged vegetation include flushing and drainage in estuaries (ISA, Appendix 10, section 10.6).

b. Deposition-Related Effects in Terrestrial Ecosystems

The evidence of atmospheric deposition contributing to acidification and N enrichment-related effects in terrestrial systems is strong, as evidenced by the causal determinations made in the ISA and summarized in section II.C.1.b(2) and II.C.1.c(2) above. Accordingly, the subsections below describe the available information in this review, including that available in the last review, regarding quantitative relationships between atmospheric deposition rates and specific terrestrial effects of interest.

The terrestrial analyses in the 2012 review included a critical load-based quantitative modeling analysis focused on BC:Al ratio in soil (the benchmarks for which are based on laboratory responses rather than field measurements) for terrestrial acidification and a qualitative characterization of nutrient enrichment (2009 REA). The more qualitative approach taken for nutrient enrichment in the 2012 review involved describing deposition ranges identified from observational or modeling research as associated with potential effects/changes in species, communities, and ecosystems, with recognition of uncertainties associated with quantitative analysis of these depositional effects (2011 PA, section 3.2.3). In this review, rather than performing new quantitative analyses focused on terrestrial ecosystems, we draw on analyses in the 2009 REA, and on more recent published studies recognized in the ISA that provide information pertaining to deposition levels associated with effects related to terrestrial acidification and N enrichment. This approach considers the available studies with investigation into various assessment approaches.

The subsections below discuss the available studies of deposition and risk to trees (section II.C.3.b(1)) and to herbs, shrubs, and lichens in section II.C.3.b(2). Since the 2012 combined review of the secondary NAAQS for N oxides and SO_X, in addition to publications of analyses that apply steady-state (and dynamic) modeling to predict future soil acidity conditions in various regions of the U.S. under differing atmospheric loading scenarios (ISA, Appendix 4, section 4.6.2), several publications have analyzed large datasets from field assessments of tree growth and survival, as well as understory plant community richness, with estimates of atmospheric N and/or S deposition (ISA, Appendix 6, section 6.5). These latter studies investigate the existence of associations of variations in plant community or individual measures (*e.g.,* species richness, growth, survival) with a metric for deposition during an overlapping time period, generally of a decade or two in duration. Soil acidification modeling and observational studies, as well as experimental addition studies, each with their various design features and associated strengths and limitations (as noted immediately below), inform consideration of N and S deposition levels of interest in the review.

In general, observational or gradient studies differ from the chemical mass balance modeling approach in a number of ways that are relevant to their consideration and use for our purposes in this review. One difference of note is the extent to which their findings reflect or take into account the ecosystem impacts of historical deposition. Observational studies are describing variation in indicators in the current context (with any ecosystem impacts, including stores of deposited chemicals that remain from historical loading). Historical loading, and its associated impacts, can also contribute to effects analyzed with estimates of more recent deposition in observational studies. Mass balance modeling, in the steady-state mode that is commonly used for estimating critical loads for acidification risk, does not usually address the complication of historical deposition impacts that can play a significant role in timing of system recovery. In this type of modeling, timelines of the various processes are not addressed. While this provides a simple approach that may facilitate consideration unrelated to recovery timelines, it cannot address the potential for changes in influential factors that may occur over time with different or changed deposition patterns.

For example, in considering the potential for terrestrial ecosystem impacts associated with different levels of deposition, the simple mass balance models common for estimating critical acid loads related to BC:Al ratio are often run for the steady state case. Accordingly, the underlying assumption is that while historic deposition, and the various ways it may affect soil chemistry into the future (*e.g.,* through the stores of historically deposited sulfur), may affect time to reach steady state (*e.g.,* as the system processes the

The website also indicates that '' EPA expects practices in place by 2017 to meet 60 percent of the necessary reductions,'' and for some areas to recover before others, but for it to take years after 2025 for the Bay and its tributaries to fully recover (*https://www.epa.gov/chesapeake-bay-tmdl/frequent-questions-about-chesapeake-bay-tmdl*).

[42] For example, across the 74 estuaries in the 3-state coastal region studied, N from atmospheric deposition to estuary watersheds was generally estimated to account for less than 25% of total N inputs, while estimates for a few small estuaries in CT were higher than 51% (but below 75%) (Latimer and Charpentier, 2010).

[43] One evaluation of progress in achieving mandated N reductions in the Neuse River Basin in NC found that flow-normalized N loading from NO_3^- decreased beginning in the 1992–1996 period (ISA Appendix 10, section 10.2; Lebo et al., 2012).

past loadings), it would not be expected to affect the steady state solution (*i.e.,* the estimated critical load for the specified soil acidification indicator target value). The complexities associated with site-specific aspects of ecosystem recovery from historic depositional loading (which contribute uncertainties to interpretation of steady-state solutions) become evident through application of dynamic models.

Observational studies, on the other hand, due to their focus on an existing set of conditions, are inherently affected by the potential influence of historical deposition and any past or remaining deposition-related impacts on soil chemistry and/or biota, in addition to other environmental factors. The extent of the influence of historical deposition (and its ramifications) on the associations reported in these studies with metrics quantifying more recent deposition is generally not known. Where patterns of spatial variation in recent deposition are similar to those for historic deposition, there may be potential for such influence. This is an uncertainty associated with interpretation of the observational studies as to the deposition levels that may be contributing to the observed variation in plant or plant community responses. Thus, while observational studies contribute to the evidence base on the potential for N/S deposition to contribute to ecosystem effects (and thus are important evidence in the ISA determinations regarding causality), their uncertainties (and underlying assumptions) differ from those of modeling analyses, and they may be somewhat less informative with regard to identification of specific N and S deposition levels that may elicit ecosystem impacts of interest. Both types of studies, as well as N addition experiments, which are not generally confounded by exposure changes beyond those assessed (yet may have other limitations) have been considered, with key findings summarized below.

(1) Deposition and Risks to Trees

The available quantitative information regarding S and N deposition and effects on trees including modeling applications, both from the 2012 review and from studies, is described in the ISA. Steady-state modeling analysis performed in the 2009 REA estimated annual amounts of acid deposition at or below which one of three BC:Al target values would be met in a 24-state area in which the acid-sensitive species, red spruce and sugar maple, occur. A range of acid deposition was estimated for each of the three target values. Recent estimates of total S and N deposition in regions of the U.S. appear to meet all but the most restrictive of these targets, for which the uncertainty is greatest (*e.g.,* ISA, Appendix 2, sections 2.6 and 2.7). Uncertainties associated with these analyses include those associated with the limited dataset of laboratory-generated data on which the BC:Al target values are based (PA, section 5.3.2).There are also uncertainties in the steady-state modeling parameters, most prominently those related to base cation weathering and acid neutralizing capacity (2009 REA, section 4.3.9). More recent publications have employed a new approach to estimating these parameters, including the weathering parameter (BCw), which reduced the uncertainty associated with this parameter (*e.g.,* Phelan et al., 2014; McDonnell et al., 2012; ISA, Appendix 4, sections 4.6.2.1 and 4.8.4 and Appendix 5, section 5.4).

Experimental addition studies of S, or S plus N have been performed in eastern locations and focused on a small set of species, including sugar maple, aspen, white spruce, yellow poplar, and black cherry; these studies generally have not reported growth effects (PA, Appendix 5B, section 5B.3.1; ISA, Appendix 6, sections 6.3.4, 6.3.5 and Table 6–21). A study involving both S and N additions greater than 20 kg/ha-yr for each substance reported increased growth rate for sugar maple but not for the second species (Bethers et al., 2009), while another study of similar dosing of S and N reported reduced growth in three species after 10 years that resolved in two of the species after 22 years (Jensen et al., 2014). In both situations, background deposition contributions were also appreciable, *e.g.,* greater than 6 kg N/ha-yr (PA, Appendix 5B, Table 5B–1). Uncertainties associated with these analyses include the extent to which the studies reflect steady-state conditions. Given the variability in the durations across these studies and the relatively short durations for some (*e.g.,* less than five years), it might be expected that steady-state conditions have not been reached, such that the S/N loading is within the buffering capacity of the soils. With regard to N addition, the available studies have reported mixed results for growth and survival for several eastern species including oaks, spruce, maples and pines (PA, Table 5B–1; Magill et al., 2004; McNulty et al., 2005; Pregitzer et al., 2008; Wallace et al., 2007). Some studies have suggested that this variation in responses is related to the dominant mycorrhizal association of the species (*e.g.,* Thomas et al., 2010). It is not clear the extent to which such findings may be influenced by species-specific sensitivities or soils and trees already impacted by historic deposition, or other environmental factors.

With regard to S deposition, the two large observational studies that analyzed growth and/or survival measurements in tree species at sites in the eastern U.S. or across the country report negative associations of tree survival and growth with the S deposition metric for nearly half the species individually and negative associations of tree survival for 9 of the 10 species' functional type groupings (Dietze and Moorcroft, 2011; Horn et al., 2018 [44]). Interestingly, survival for the same 9 species groups was also negatively associated with long-term average ozone (Dietze and Moorcroft, 2011). The S deposition metrics for the two studies were mean annual average deposition estimates for total S or sulfate (wet deposition) during different, but overlapping, time periods of roughly 10-year durations. The full range of average SO_4^{2-} deposition estimated for the 1994–2005 time period assessed by Dietze and Moorcroft (2011) for the eastern U.S. study area was 4 to 30 kg S $ha^{-1}yr^{-1}$. The second study covered the more recent time period (2000–2013) and 71 species distributed across the U.S. To draw on this study with regard to S deposition levels of interest, the distribution of S deposition estimates for each species were considered in the PA (Appendix 5B, section 5B.2 and Attachments 2A and 2B). In this national-scale analysis, the range of median S deposition for sites of those species for which negative associations with growth or survival were reported, was 5 to 12 kg S $ha^{-1}yr^{-1}$, with few exceptions (Horn et al., 2018).[45]

Regarding N deposition, the three large observational studies that analyzed growth and/or survival measurements in tree species at sites in the northeastern or eastern U.S., or across the country, report associations of tree survival and growth with several N deposition metrics (Dietze and Moorcroft, 2011; Thomas et al., 2010; Horn et al., 2018). Estimates of average N deposition across the full set of sites analyzed by Thomas et al. (2010) in 19 states in the northeastern quadrant of the U.S. ranged from 3 to 11 kg N/ha-yr for the period 2000–2004. The N deposition metrics for these three studies were mean

[44] The study by Horn et al. (2018) constrained the S analyses to preclude a positive association with S.

[45] This range is for median S deposition estimates (based on measurement interval average, occurring within 2000–2013) of nonwestern species with negative associations with growth or survival ranged (Horn et al., 2018).

annual average deposition estimates for total N or nitrate (wet deposition) during different, but overlapping, time periods that varied from 5 to more than 10 years. The full range of average NO_3 deposition estimated for the 1994–2005 time period assessed by Dietze and Moorcroft (2011) for the eastern U.S. study area was 6 to 16 kg N $ha^{-1}yr^{-1}$. Median N deposition estimated (measurement interval average [falling within 2000–13]) at sites of nonwestern species for which associations with growth or survival were negative (either over full range or at median for species) ranged from 7 to 12 kg N $ha^{-1}yr^{-1}$ (Horn et al., 2018).

In considering what can be drawn from these studies with regard to deposition levels of potential interest for tree species effects, such as the ranges identified above, a number of uncertainties are recognized. For example, several factors were not accounted for that have potential to influence tree growth and survival. Although O_3 was analyzed in one of the three studies, soil characteristics and other factors with potential to impact tree growth and survival (other than climate) were not assessed, contributing uncertainty to their interpretations. Further, differences in findings for the various species (or species' groups) may relate to differences in geographic distribution of sampling locations, which may contribute to differences in ranges of deposition history, geochemistry etc.

Additionally, as noted above, the extent to which associations reflect the influence of historical deposition patterns and associated impact is unknown. There is a general similarity in findings among the studies, particularly of Horn et al. (2018) and Dietze and Moorcroft (2011), even though the time period and estimation approach for S and N deposition differ (PA, Appendix 5B, Table 5B–6). The extent to which the differences in growth or survival across sites with different deposition estimates are influenced by historically higher deposition (*e.g.,* versus the magnitude of the average over the measurement interval) is unknown. Given the role of deposition in causing soil conditions that affect tree growth and survival, and a general similarity of spatial variation of recent deposition to historic deposition, an uncertainty associated with quantitative interpretation of these studies is the extent to which the similarity in the two studies' finding may indicate the two different metrics to both be reflecting geographic variation in impacts stemming from historic deposition. Although the spatial deposition patterns across the full time period are somewhat similar, the magnitudes of S and N deposition in the U.S. have changed appreciably over the time period covered by these studies (*e.g.,* PA, Appendix 5B, Figures 5B–9 through 5B–12).[46] The appreciable differences in deposition magnitude across the time periods also contribute uncertainty to interpretations related to specific magnitudes of deposition associated with patterns of tree growth and survival. There are few studies of recovery in historically impacted areas in the ISA that might address such uncertainties (*e.g.,* ISA, section IS.4.1, IS.5.1, IS.11.2).

(2) Deposition Studies of Herbs, Shrubs and Lichens

The available studies that may inform our understanding of exposure conditions, including N deposition levels, of potential risk to herb, shrub and lichen communities include observational or gradient studies and experimental addition conducted in different parts of the U.S. Among the studies of plant communities are observational studies of herbaceous species richness at sites in a multi-state study area and of grassland or coastal sage scrub communities in southern California, and experimental addition experiments in several western herb or shrub ecosystems. The experimental addition studies indicate effects on community composition associated with annual N additions of 10 kg N/ha-yr (in the context of background deposition on the order of 6 kg N/ha-yr) and higher (PA, section 5.3.3.1). Experiments involving additions of 5 kg N/ha-yr variously reported no response or increased cover for one species (in context of background deposition estimated at 5 kg N/ha-yr). The landscape-level analysis of coastal sage scrub community history in southern California observed a greater likelihood of recovery of sites with relatively low invasion of exotic invasive grasses when the N deposition metric level was below 11 kg N/ha-yr. Lastly, the multi-state analysis of herbaceous species richness reported a negative association with N deposition metric values above 8.7 kg N/ha-yr at open-canopy sites and above 6.5 kg/ha-yr and low pH sites. In forested sites, negative associations were found above 11.6 kg N/ha-yr in sites with acidic soil pH at or above 4.5 (PA, section 5.3.3).

Limitations and associated uncertainties vary between the two types of studies (experimental addition and observational). Both are limited with regard to consideration of the impacts of long-term deposition. While there are some experimental addition studies lasting more than 20 years, many are for fewer than 10 years. Additionally, such studies are necessarily limited with regard to the number and diversity of species and ecosystems that can be analyzed. In the case of observational studies, decades of S and N deposition—and elevated levels of airborne pollutants, including ozone and nitrogen oxides, in the U.S.—have affected the ecosystems studied; and these studies generally have not accounted for the influence of historical deposition on the associations observed with more recent deposition metrics. Further, given that observational studies occur in real time, there is uncertainty associated with characterization, including quantification, of the particular exposure conditions that may be eliciting patterns of ecosystem metrics observed.

The few studies of lichen species diversity and deposition-related metrics, while contributing to the evidence that relates deposition, including acidic deposition in eastern locations, to relative abundance of different lichen species, are more limited with regard to the extent that they inform an understanding of specific exposure conditions in terms of deposition levels that may elicit specific responses. A number of factors limit such interpretations of the currently available studies (PA, section 5.3.3.2). These factors include uncertainties related to the methods employed to represent N deposition, the potential role of other unaccounted-for environmental factors (including O_3, SO_2, S deposition and historical air quality and associated deposition), and uncertainty concerning the independence of any effect of deposition levels from residual effects of past patterns of deposition. We additionally note the information on exposure conditions associated with effects on lichen species of oxides of N such as HNO_3 in section II.C.3.c below.

c. Direct Effects of N Oxides, SO_X and PM in Ambient Air

The evidence related to exposure conditions for other effects of SO_X, N oxides and PM in ambient air includes concentrations of SO_2 and NO_2 associated with effects on plants,

[46] Sulfur deposition in the U.S. across the full period of these studies (1994–2013) generally exhibited a consistent pattern of appreciable declines, with study plots, particularly in the East, having experienced decades of much higher S deposition in the past. Similarly, N deposition during the combined time period of the studies (1994–2013) has also changed, with many areas experiencing declines and a few areas experiencing deposition increases for some N species and in total N (PA, section 6.2.1).

concentrations of NO_2 and HNO_3 associated with effects on plants and lichens, and quite high concentrations of PM that affect plant photosynthesis. The PM effects described in the evidence are nearly all related to deposition. With regard to oxides of N and S, we note that some effects described may be related to dry deposition of SO_2 and HNO_3 onto plant and lichen surfaces. These exposure pathways would be captured in observational studies and could also be captured in some fumigation experiments.

With regard to SO_2, the evidence comes from an array of studies, primarily field studies for the higher concentrations associated with visible foliar injury and laboratory studies for other effects. With regard to oxides of N, the evidence indicates that effects on plants and lichens occur at much lower exposures to HNO_3 (than to NO_2). The laboratory and field studies of oxides of N vary regarding their limitations; field studies are limited with regard to identification of threshold exposures for the reported effects, and uncertainties associated with controlled experiments include whether the conditions under which the observed effects occur would be expected in the field. With regard to the latter, the elevated concentrations of NO_2 and HNO_3 in the Los Angeles area in the 1970s–90s are well documented as is the decline of lichen species in the Los Angeles Basin during that time (PA, section 5.4.2).[47] Such an assessment of lichen species and elevated concentrations of N oxides is not available for other locations across the U.S.

Ecological effects associated with SO_X in ambient air include effects on vegetation, such as foliar injury, depressed photosynthesis, and reduced growth or yield. Within the recently available information are observational studies reporting increased tree growth in association with reductions in SO_2 emissions. These studies, however, do not generally report the SO_2 concentrations in ambient air or account for the influence of changes in concentrations of co-occurring pollutants such as ozone (ISA, Appendix 3, section 3.2). The available data for direct effects are drawn from experimental studies or observational studies in areas near sources, with the most studied effect being visible foliar injury to various trees and crops (ISA, Appendix 3, section 3.2; 1982 AQCD, section 8.3). With regard to foliar injury, the current ISA states there to be ''no clear evidence of acute foliar injury below the level of the current standard'' (ISA, p. IS–37). Few studies report yield effects from acute exposures, with the available ones reporting relatively high concentrations, such as multiple hours with concentrations above 1 ppm (1982 AQCD, section 8.3). Effects have also been reported on photosynthesis and other functions in a few lichen species groups, although recovery of these functions was observed from short, multi-hour exposures to concentrations below about 1 ppm (ISA, Appendix 3, section 3.2).

The direct welfare effects of N oxides in ambient air include effects on plants and lichens. For plants, studies reported in the ISA did not report effects on photosynthesis and growth resulting from exposures of NO_2 concentrations below 0.1 ppm (ISA, Appendix 3, section 3.3). The information is more limited regarding exposures to other oxides of N.

The evidence for HNO_3 includes controlled exposure studies describing foliar effects on several tree species. Nitric acid has also been found to deposit on and bind to the leaf or needle surfaces. Studies of ponderosa pine, white fir, California black oak and canyon live oak involving continuous chamber exposure over a month to 24-hour average HNO_3 concentrations generally ranging from 10 to 18 $\mu g/m^3$ (moderate treatment) or 18 to 42 $\mu g/m^3$ (high treatment), with the average of the highest 10% of concentrations generally ranging from 18 to 42 $\mu g/m^3$ (30–60 $\mu g/m^3$ peak) or 89 to 155 $\mu g/m^3$ (95–160 $\mu g/m^3$ peak), resulted in damage to foliar surfaces of the 1 to 2-year old plants (ISA, Appendix 3, section 3.4; Padgett et al., 2009). The moderate treatment reflects exposure concentrations observed during some summer periods in the Los Angeles Basin in the mid-1980s, including a high HNO_3 concentration of 33 ug/m^3 in August 1986 (Padgett et al., 2009; Bytnerowicz and Fenn, 1996), when annual average NO_2 concentrations in the Basin ranged up to 0.058 ppm (U.S. EPA, 1987).

In addition to the observational studies of lichen communities in the Los Angeles Basin impacted by ambient air concentrations from the 70s, the available evidence for lichens includes a recent laboratory study, involving daily HNO_3 exposures for 18 to 78 days, with daily peaks near 50 ppb (~75 $\mu g/m^3$) that reported decreased photosynthesis, among other effects (ISA, Appendix 6, section 6.2.3.3; Riddell et al., 2012). Based on studies extending back to the 1980s, HNO_3 has been suspected to have had an important role in the dramatic declines of lichen communities that occurred in the Los Angeles basin (ISA, Appendix 3, section 3.4; Nash and Sigal, 1999; Riddell et al., 2008; Riddell et al., 2012). For example, lichen transplanted from clean air habitats to analogous habitats in the Los Angeles basin in 1985–86 were affected in a few weeks by mortality and appreciable accumulation of H^+ and NO_3^- (ISA, Appendix 3, section 3.4; Boonpragob et al., 1989). The Los Angeles metropolitan area experienced NO_2 concentrations well in excess of the NO_2 secondary standard during this period. For example, annual average NO_2 concentrations in Los Angeles ranged up to 0.078 ppm in 1979 and remained above the standard level of 0.053 ppm into the early 1990s (PA, Appendix 5B, section 5B.4.1). Over the last several decades, the magnitude of both dry deposition of HNO_3 and annual average HNO_3 concentration in this area, and nationally, and the spatial extent of high deposition rates and concentrations have dramatically declined (PA, Figure 2–23; ISA, Appendix 2, Figure 2–60). The evidence indicates NO_2, and particularly HNO_3, as ''the main agent of decline of lichen in the Los Angeles basin'' (ISA, Appendix 3, p. 3–15), thus indicating a role for the elevated concentrations of nitrogen oxides documented during the 1970s to 1990s (and likely also occurring earlier). More recent studies indicate variation in eutrophic lichen abundance to be associated with variation in N deposition metrics (ISA, Appendix 6, section 6.2.3.3). The extent to which these associations are influenced by residual impacts of historic air quality is unclear and the extent to which similar atmospheric conditions and ecological relationships exist in other locations in the U.S. is uncertain.

Little information is available on welfare effects of airborne PM at concentrations commonly occurring in the U.S. today, and the available information does not indicate effects to occur under such conditions. The extent to which quantitative information is available for airborne PM concentrations associated with ecological effects varies for the different types of effects. The concentrations at which PM has been reported to affect vegetation (*e.g.,* through effects on leaf surfaces, which may affect function, or through effects

[47] For example, concentrations of HNO_3 reported in forested areas of California in the 1980s ranged up to 33 ug/m^3, and annual average NO_2 concentrations in the Los Angeles area ranged from 0.078 ppm in 1979 to 0.053 ppm in the early 1990s (PA, section 5.4.2). Ambient air concentrations of HNO_3 in the Los Angeles metropolitan area have declined markedly, as shown in Figure 2–23 of the PA, which compares concentrations at CASTNET monitoring sites between 2019 and 1996 (PA, section 2.4.1).

on gas exchange processes) are generally higher than those associated with conditions meeting the current standards and may be focused on specific particulate chemicals rather than on the mixture of chemicals in PM occurring in ambient air (ISA, Appendix 15, sections 15.4.3 and 15.4.6). Studies involving ambient air PM have generally involved conditions that are much higher than those common to the U.S. today (ISA, Appendix 15, sections 15.4.3 and 15.4.4).

D. Quantitative Exposure/Risk Assessment for Aquatic Acidification

Our consideration of the scientific evidence available in the current review is informed by results from quantitative analyses of estimated acidic deposition and associated risk of aquatic acidification (PA, section 5.1 and Appendix 5A). These REA analyses, like those in the last review, make use of well-established modeling tools and assessment approaches for this endpoint. Other categories of effects of S and N deposition have been the subject of quantitative analyses, both in the last review (*e.g.,* terrestrial acidification) and in other contexts (*e.g.,* eutrophication of large rivers and estuaries), each with associated complexities and specificity (section II.C.3 above). The PA while focusing the new analyses on aquatic acidification risks, as summarized here, also draws on findings of available analyses for the other categories of effects (*e.g.,* as summarized in section II.C.3 above).

The REA analyses, summarized here and presented in detail in Appendix 5A of the PA, have focused on ANC as an indicator of aquatic acidification risk (PA, section 5.1 and Appendix 5A). This focus is consistent with such analyses performed in the 2012 review and with the longstanding evidence that continues to demonstrate a causal relationship between S and N deposition and alteration of freshwater biogeochemistry and between acidifying S and N deposition and changes in biota, including physiological impairment and alteration of species richness, community composition, and biodiversity in freshwater ecosystems (ISA, Table ES–1), as summarized in section II.C.1 above.

Section II.D.1 summarizes key aspects of the assessment design, including the conceptual approach and tools, indicator reference or benchmark concentrations, the assessment scales, study areas and waterbodies analyzed, and exposure and risk metrics derived. Key limitations and uncertainties associated with the assessment are identified in section II.D.2 and the exposure and risk estimates are summarized in section II.D.3. An overarching focus of these analyses is characterization of aquatic acidification risk in sensitive ecoregions associated with different deposition conditions.

1. Key Design Aspects

The REA for this review entailed a multi-scale analysis of waterbodies in the contiguous U.S. that assessed waterbody-specific aquatic acidification at three spatial scales: national, ecoregion, and case study area (PA, Appendix 5A). The assessment involved evaluation of deposition and water quality response at the waterbody site level, which has been summarized at the national, ecoregion, and case study level. The national-scale analysis involved waterbody sites across the U.S. for which relevant data were available.[48] The ecoregion-scale analysis focused on waterbodies in a set of 25 ecoregions generally characterized as acid-sensitive; and the more localized case study-scale analysis focused on waterbodies in five case study areas across the U.S., within each of which were Class I areas.

The impact of acidifying S or N deposition estimated for five different time periods (2001–03, 2006–08, 2010–12, 2014–16 and 2018–20) was evaluated using a CL approach that relied on waterbody location-specific CL estimates derived for other applications and available in the National Critical Loads Database (NCLD)[49] (PA, Appendix 5A). The CL estimates used in the assessment were largely based on steady-state modeling, and the modeling applications focused on ANC, producing CL estimates (acidifying deposition in terms of kg/ha-yr or meq/m^2-yr [milliequivalents per square meter per year] for S and N compounds) for different ANC concentrations. Of the 84 ecoregions in the contiguous U.S., 64 have at least one waterbody site with a CL estimate (PA, Appendix 5A). Given its common use in categorizing waterbody sensitivity, ANC was used as the indicator of acidification risk in this assessment (PA, section 5.1.2.2). Deposition estimates, as 3-year averages of annual TDep estimates, were compared to the CL estimates for three different ANC benchmark concentrations (targets or thresholds), in recognition of the watershed variability and associated uncertainties, as an approach for characterizing aquatic acidification risk (PA, section 5.1).

The available evidence and scientific judgments were considered in identifying the three ANC benchmark concentrations: 20 μeq/L, 30 μeq/L, 50 μeq/L (PA, section 5.1.2.2). Selection of these benchmark ANC concentrations reflects several considerations. For example, most aquatic CL studies conducted in the U.S. since 2010 use an ANC of 20 and/or 50 μeq/L, because 20 μeq/L has been suggested to provide protection for a ''natural'' or ''historical''[50] range of ANC, and 50 μeq/L to provide greater protection, particularly from episodic acidification events[51] (Dupont et al., 2005; Fakhraei et al., 2014; Lawrence et al., 2015; Lynch et al., 2022; McDonnell et al., 2012, 2014; Sullivan et al., 2012a, 2012b). For example, levels below 20 μeq/L have been associated with fish species reductions in some sensitive waterbodies of the Shenandoah and Adirondack Mountains. Levels of ANC ranging from 30 to 40 μeq/L have been reported to provide sufficient buffering to withstand acidic inputs associated with episodic springtime rain or snowmelt events. An ANC value of 50 μeq/L has often been cited in the literature as a target for many areas, and in the 2012 review, ANC values at or above 50 μeq/L were described as providing an additional level of protection although with increasingly greater uncertainty for values at/above

[48] The national-scale analysis focused on the contiguous U.S. as there are insufficient data available for Hawaii, Alaska, and the territories. Of the four hierarchical levels of ecoregion categorization, the REA utilized level III which divides the contiguous U.S. into 84 ecoregions (Omernik and Griffith, 2014). The 69 of these 84 ecoregions in which there was at least one site with sufficient data comprised the national scale.

[49] The NCLD is comprised of CLs calculated from several common models: (1) steady-state mass-balance models such as the Steady-State Water Chemistry (SSWC), (2) dynamic models such as Model of Acidification of Groundwater In Catchments (MAGIC) (Cosby et al., 1985) or Photosynthesis EvapoTranspiration Biogeochemical model (PnET–BGC) (Zhou et. al., 2015) run out to year 2100 or 3000 to model steady-state conditions and (3) regional regression models that use results from dynamic models to extrapolate to other waterbodies (McDonnell et. al., 2012; Sullivan et al., 2012a). Data and CL estimates in the NCLD are generally focused on waterbodies impacted by deposition-driven acidification and are described in documentation for the database version (PA, section 5.1.2.3; Lynch et al., 2022).

[50] For example, dynamic modeling simulations in acid-sensitive streams of the southern Blue Ridge Mountains have predicted all streams to have pre-industrial time ANC levels above 20 μeq/L, while also predicting more than a third of the streams to have pre-industrial ANC levels below 50 μeq/L (Sullivan et al., 2011).

[51] As noted in section II.C.1 above, events such as spring snowmelt and heavy rain events can contribute to episodic acidification events. For example, in some impacted northeastern waterbodies, particularly headwater streams, ANC levels may dip below zero for hours to days or weeks in response to such events, while waterbodies labeled chronically acidic have ANC levels below zero throughout the year (ISA, Appendix 6, section 6.1.1.1; Driscoll et al., 2001).

75 μeq/L[52] (2011 PA, pp. 7–47 to 7–48). In the western U.S., lakes and streams vulnerable to deposition-driven aquatic acidification are often found in the mountains where surface water ANC levels are naturally low and typically vary between 0 and 30 μeq/L (Williams and Labou, 2017; Shaw et al., 2014). For these reasons, this assessment, also develops results for an ANC threshold of 50 μeq/L for sites in the East and 20 μeq/L for sites in the West (denoted as ''50/20'' μeq/L).[53] Thus, the set of benchmark concentrations used in this REA include ANC concentrations that are naturally occurring in many areas and also include concentrations that, depending on watershed characteristics, may provide additional buffering in times of episodic acidification events.

Since acidification of waterbodies is controlled by local factors such as geology, hydrology, and other landscape factors, aquatic CLs for acidification were determined at the waterbody level (based on site-specific data) and then summarized at the national, ecoregion, and case study level. National-scale analyses were performed using two approaches: one considering acid deposition of N and S compounds combined and one for S deposition only. Findings from these analyses indicated that across the five different time periods analyzed, the percent of waterbodies exceeding their CLs was similar for the two approaches (PA, Appendix 5A, sections 5A.1.6.2 and 5A.2.1). Thus, to facilitate interpretation of the results, further analysis of the results focused on the findings for S only deposition.

Critical load estimates for specific waterbody sites across the contiguous U.S. were drawn from the NCLD (version 3.2.1)[54] for comparison to total deposition estimates in the same locations for the five time periods. Comparisons were only performed for sites at which CL estimates were greater than zero, indicating that achievement of the associated target ANC would be feasible.[55] The results of these analyses are summarized with regard to the spatial extent and severity of deposition-related acidification effects and the protection from these effects associated with a range of annual S deposition.

The ecoregion-scale analyses focused on 25 ecoregions,[56] 18 in the East and 7 in the West. Ecoregions are areas of similarity regarding patterns in vegetation, aquatic, and terrestrial ecosystem components. The 25 ecoregions in this analysis each had more than 50 waterbody sites (or locations) for which a prior modeling application had developed a CL estimate, which was available in the NCLD (PA, section 5A.2.2.2). Although a total of 32 ecoregions had more than 50 CL sites,[57] four in the West were excluded as having very low deposition that resulted in no CL exceedances across the complete 20-year analysis period. An additional three ecoregions (*i.e.,* Southeastern Plains, Southern Coastal Plain, and Atlantic Coastal Pine Barrens) were excluded as they are known to have naturally acidic surface waters, and the low CL estimates for these ecoregions (and resulting CL exceedances) are likely driven by natural acidity linked to high levels of dissolved organic carbon, hydrology, and natural biogeochemical processes rather than atmospheric deposition (2008 ISA, section 3.2.4.2; Baker et al., 1991; Herlihy et al., 1991).

The case study scale represents the smallest scale at which CLs and their comparison to deposition estimates were summarized and is intended to give some insight into potential local impacts of aquatic acidification. Five case study areas across the U.S. were examined: Shenandoah Valley Area, White Mountain National Forest, Northern Minnesota, Sierra Nevada Mountains, and Rocky Mountain National Park (details presented in PA, section 5.1.3.3 and Appendix 5A, section 5A.2.1). These areas include a number of national parks and forests that vary in their sensitivity to acidification, but represent high value or protected ecosystems, such as Class 1 areas, wilderness, and national forests (PA, Appendix 5A, section 5A.2.1). The most well studied of these, the Shenandoah Valley Area case study, includes the Class I area, Shenandoah National Park, and waterbodies in each of three ecoregions. The number of waterbody sites with CLs available in the NCLD for the Shenandoah study area (4,977 sites) is nearly an order of magnitude greater than the total for the four other areas combined (524 sites).

The analyses at different scales differed in how results were summarized and evaluated. For example, at the national scale, percentages of water bodies with deposition estimates exceeding their CLs were reported for each of the five time periods for which deposition was assessed. From the case study scale analyses, we focused primarily on the distribution of CL estimates in each study area. In so doing, the CLs for each case study area were characterized in terms of the average, and two lower percentiles (*e.g.,* the 30th percentile CL, which is the value below 70% of the CL estimates for that study area, and the 10th percentile).

In the ecoregion-scale analyses, percentages of waterbody sites per ecoregion that exceeded their estimated CLs and percentages of waterbody sites that fell at or below them—for each of the three ANC thresholds—were summarized by ecoregion for each of the five time periods: 2001–2003, 2006–2008, 2010–2012, 2014–2016 and 2018–2020 (PA, section 5.1.3.2 and Appendix 5A, section 5A.2.2). Percentages of waterbody sites that did not exceed their estimated CLs were described as achieving the associated ANC threshold (or target). These results were then considered in two ways. The first is based on a binning of this dataset of ecoregion-time period combinations and percentages by ecoregion median deposition levels (at/below 5 kg/ha-yr, at/below 6 kg/ha-yr, etc). The second approach involved summarizing ecoregion-specific trends in percentage of waterbodies per ecoregion estimated to achieve the three threshold or target ANC values (or estimated to exceed the associated CLs).

2. Key Limitations and Uncertainties

We have characterized the nature and magnitude of associated uncertainties and their impact on the REA estimates

[52] In considering higher ANC levels (*e.g.,* up to 80 μeq/L and higher), it was also recognized that many waterbodies, particularly in acid-sensitive regions of contiguous never had an ANC that high and would never reach an ANC that high naturally (Williams and Labou 2017; Shaw et al., 2014; PA, section 5.1.2.2). Additionally, in conveying its advice in the 2012 review, the CASAC expressed its view that ''[l]evels of 50 μeq/L and higher would provide additional protection, but the Panel has less confidence in the significance of the incremental benefits as the level increases above 50 μeq/L'' (Russell and Samet, 2010a; pp. 15–16).

[53] This approach is also used in multiple studies and the NCLD (PA, section 5.1.2.2).

[54] A waterbody is represented as a single CL value. In many cases, a waterbody has more than one CL value calculated for it because different studies determined a value for the same waterbody. When more than one CL exists, the CL from the most recent study was selected, while the CL values were averaged when the publications are from the same timeframe (PA, appendix 5A, section 5A.1.5).

[55] Critical load estimates are estimates of the S deposition rate at which a particular waterbody site is estimated to be able to achieve a specified ANC level. A CL estimate at or below zero would indicate that no S deposition estimate would provide for such a result.

[56] The ecoregion classification scheme used to group waterbody sites into ecoregions is based on that described in Omernik (1987), which classifies regions through the analysis of the patterns and the composition of biotic and abiotic characteristics that affect or reflect differences in ecosystem quality and integrity (*e.g.,* geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology).

[57] In light of the size of the level III ecoregions, 50 was identified as an appropriate minimum number of CL sites within an ecoregion to include it in the analysis.

based primarily on a mainly qualitative approach, informed by several quantitative sensitive analyses (PA, Appendix 5A, section 5A.3). The mainly qualitative approach used to characterize uncertainty here and in quantitative analyses in other NAAQS reviews is described by World Health Organization (WHO, 2008). Briefly, with this approach, we have identified key aspects of the assessment approach that may contribute to uncertainty in the conclusions and provided the rationale for their inclusion. Then, we characterized the magnitude and direction of the influence on the assessment for each of these identified sources of uncertainty. Consistent with the WHO (2008) guidance, we scaled the overall impact of the uncertainty by considering the degree of uncertainty as implied by the relationship between the source of uncertainty and the exposure and risk estimates. A qualitative characterization of low, moderate, and high was assigned to the magnitude of influence and knowledge base uncertainty descriptors, using quantitative observations relating to understanding the uncertainty, where possible. Where the magnitude of uncertainty was rated low, it was judged that large changes within the source of uncertainty would have only a small effect on the assessment results (*e.g.,* an impact of few percentage points upwards to a factor of two). A designation of medium implies that a change within the source of uncertainty would likely have a moderate (or proportional) effect on the results (*e.g.,* a factor of two or more). A characterization of high implies that a change in the source would have a large effect on results (*e.g.,* an order of magnitude). We also included the direction of influence, whether the source of uncertainty was judged to potentially over-estimate (''over''), under-estimate (''under''), or have an unknown impact to exposure/risk estimates.

Two types of quantitative analyses informed our understanding of the variability and uncertainty associated with the CL estimates developed in this assessment and support the overall uncertainty characterization. The first type of analysis is a sensitivity analysis using Monte Carlo techniques to quantify CL estimate uncertainty associated with several model inputs, and the second is an analysis of the variation in CL estimates among the three primary modeling approaches on which the CLs used in this assessment were based.

As overarching observations regarding uncertainty associated with this REA, we note two overarching aspects of the assessment. The first relates to interpretation of specific thresholds of ANC, and the second to our understanding of the biogeochemical linkages between deposition of S and N compounds and waterbody ANC, and the associated estimation of CLs. While ANC is an established indicator of aquatic acidification risk, there is uncertainty in our understanding of relationships between ANC and risk to native biota, particularly in waterbodies in geologic regions prone to waterbody acidity. Such uncertainties relate to the varying influences of site-specific factors other than ANC, such as soil type. Uncertainty associated with our understanding of the biogeochemical linkages between deposition and ANC and the determination of steady-state CLs is difficult to characterize and assess. Uncertainty in CL estimates is associated with parameters used in the steady-state CL models. While the Steady-State Water Chemistry (SSWC) and other CL models are well conceived and based on a substantial amount of research and applications available in the peer-reviewed literature, there is uncertainty associated with the availability of the necessary data to support certain model components.

The strength of the CL estimates and the exceedance calculation rely on the ability of models to estimate the catchment-average base-cation supply (*i.e.,* input of base cations from weathering of bedrock and soils and air), runoff, and surface water chemistry. Key parameters in this modeling include estimates of the catchment-average base-cation supply (*i.e.,* input of base cations from weathering of bedrock and soils and air), runoff, and surface water chemistry. The uncertainty associated with runoff and surface water parameters relates to availability of measurements; however, the ability to accurately estimate the catchment supply of base cations to a water body is still difficult and uncertain (PA, Appendix 5A, section 5A.3). This area of uncertainty is important because the catchment supply of base cations from the weathering of bedrock and soils is the factor with the greatest influence on the CL calculation and has the largest uncertainty (Li and McNulty, 2007). For example, the well-established models generally rely on input or simulated values for BCw rate, a parameter the ISA notes to be ''one of the most influential yet difficult to estimate parameters in the calculation of critical acid loads of N and S deposition for protection against terrestrial acidification'' (ISA, section IS.14.2.2.1). Obtaining accurate estimates of weathering rates is difficult because weathering is a process that occurs over very long periods of time and the estimates on an ecosystem's ability to buffer acid deposition rely on accurate estimates of weathering. Although the approach to estimate base-cation supply for the national case study (*e.g.,* F-factor approach) has been widely published and analyzed in Canada and Europe, and has been applied in the U.S. (*e.g.,* Dupont et al., 2005 and others), the uncertainty in this estimate is unclear and could be large in some cases.

In light of the significant contribution of this input to the CL estimates, a quantitative uncertainty analysis of CL estimates based on state-steady CL modeling was performed (PA, Appendix 5A, section 5A.3.1). This analysis, involving many model simulations for the more than 14,000 waterbodies, drawing on Monte Carlo sampling, provided a description of the uncertainty around the CL estimate in terms of the confidence interval for each waterbody mean result. The size of the confidence interval for S CL estimates ranged from 0.1 kg S/ha-yr at the 5th percentile to 5.3 kg S/ha-yr at the 95th percentile. Smaller confidence intervals were associated with CLs determined with long-term water quality data and low variability in runoff measurements. Estimates of CL determined by one or very few water quality measurements, and in areas where runoff is quite variable (*e.g.,* the western U.S.), had larger confidence intervals, indicating greater uncertainty. Critical load estimates with the lowest uncertainty were for waterbody sites in the eastern U.S., particularly along the Appalachian Mountains, in the Upper Midwest, and in the Rocky Mountains, which are areas for which there are relatively larger site-specific datasets (*e.g.,* for water quality parameters). Greater uncertainty is associated with CLs in the Midwest and South and along the CA to WA coast. This uncertainty in the Midwest is associated with most of the CLs in waterbodies in this area being based on one or a few water quality measurements, while the high uncertainty for sites along the CA and WA coasts relates to variability in runoff values. On average, the size of the confidence interval for the vast majority of CLs (those based on the widely used steady-state water chemistry model) was 7.68 meq S/m^2-yr or 1.3 kg S/ha-yr, giving a confidence interval of ±3.84 meq/m^2-yr or ±0.65 kg S/ha-yr. While a comprehensive analysis of uncertainty had not been completed for these

estimates prior to this assessment, judgment by EPA experts suggested the uncertainty for combined N and S CLs to be on average about ±0.5 kg/ha-yr (3.125 meq/m^2-yr), which is generally consistent with the range of uncertainty determined from this quantitative uncertainty analysis (PA, Appendix 5A, section 5A.3).

At the ecoregion scale, 51 ecoregions had sufficient data to calculate the 5th to 95th percentile (PA, Appendix 5A, Table 5A–56). Smaller confidence intervals around the mean CL (*i.e.,* lower uncertainty CLs) were associated with ecoregions in the Appalachian Mountains (*e.g.,* Northern Appalachian and Atlantic Maritime Highlands, Blue Ridge, Northern Lakes and Forests, and North Central Appalachians) and Rockies (*e.g.,* Sierra Nevada, Southern Rockies, and Idaho Batholith). Ecoregions with more uncertain CLs included the Northeastern Coastal Zone, Cascades, Coast Range, Interior Plateau, and Klamath Mountains/California High North Coast Range.

Although the vast majority of CLs in this assessment were based on the SSWC model, an analysis was conducted to understand differences in the CLs calculated with the different methods. There are three main CL approaches all based on the watershed mass-balance approach where acid-base inputs are balanced. The three approaches include: (1) SSWC model and F-Factor that is based on quantitative relationships to water chemistry (Dupont et al., 2005; Scheffe et al., 2014; Lynch et al., 2022), (2) Statistical Regression Model that extrapolated weathering rates across the landscape using water quality or landscape factors (Sullivan et al., 2012b; McDonnell et al., 2014), and (3) Dynamic Models (Model of Acidification of Groundwater In Catchments [MAGIC)] or Photosynthesis EvapoTranspiration Biogeochemcial model [Pnet-BGC]). Critical load values were compared between these models to determine model biases. Results from the comparison between different CL methods that were used to calculate the critical loads in the NCLD are summarized in PA Appendix 5A, section 5A.3.1, for lakes in New England and the Adirondacks and streams in the Appalachian Mountains. Overall, good agreement was found between the three methods used to calculate CLs, indicating there was not a systematic bias between the methods and that they should produce comparable results when used together as they were in these analyses (PA, Appendix 5A, section 5A.3).

3. Summary of Results

The findings from the aquatic acidification REA are summarized in terms of S deposition due to the finding of a negligible additional influence of N deposition compared to S deposition on acidification in this assessment [58] (Appendix 5A, section 5A.2.1). As summarized more fully below, the analyses of five case study areas, including the acidification-impacted Shenandoah Valley area, indicate that with annual average S deposition below 12 and 10 kg/ha yr, the average waterbody in each area (average as to acid-sensitivity) would be estimated to achieve the ANC benchmarks of 20 and 50 μeq/L, respectively. Seventy percent of waterbodies in each area would be estimated to achieve these benchmarks with deposition below 10 and 7 kg/ha-yr, respectively. At the ecoregion-scale, the results from the analysis of 25 ecoregions, dominated by acid-sensitive waterbodies, indicate acid buffering capabilities to have improved substantially over the past 20 years, and particularly between the first and second decades of the period. By the 2010–2012 period, the percentages of waterbodies achieving the three ANC benchmarks in all 25 ecoregions exceeded 80%, 80% and 70% (for 20, 30 and 50 μeq/L, respectively). By the subsequent analysis period (2014–2016), these percentages were 90%, 80% and 80%. The ecoregion median annual average deposition in all 25 ecoregions was below 8 kg/ha-yr for 2010–2012 and below 5 kg/ha-yr for 2014–2016. An alternate approach to analyzing these estimates (for the 25 ecoregions across all five time periods) suggested that the three ANC benchmarks could be met in more than 80%, 80% and 70% of waterbodies per ecoregion in all ecoregions and time periods for which annual average ecoregion median deposition is estimated to be at or below 7 kg/ha-yr.

Between the three-year period of 2000–2002, which was the analysis year for the 2009 REA, and 2018–2020, the latest period considered in the REA for this review, national average sulfur deposition has declined appreciably across the U.S. This decline in deposition is reflected in the very different aquatic acidification impact estimates for the two periods. Unlike the findings for 2000–2002 in the 2009 REA, in the national-scale analysis of the current REA, few waterbody sites are estimated to be receiving deposition in excess of their CLs for relevant ANC targets under recent deposition levels. While recognizing inherent limitations and associated uncertainties of any such analysis, the national-scale assessment performed as part of the current review indicates that under deposition scenarios for the 2018–2020 time period, the percentage of waterbodies nationwide that might not be able to maintain an ANC of 50 μeq/L is less than 5% (table 1; PA, Table 5–1).

TABLE 1—PERCENTAGE OF WATERBODIES NATIONALLY FOR WHICH ANNUAL AVERAGE S DEPOSITION DURING THE FIVE TIME PERIODS ASSESSED EXCEED THE WATERBODY CL (FOR CLS GREATER THAN 0) FOR EACH OF THE SPECIFIED ANC TARGETS

ANC (μeq/L)	2001–2003 (%)	2006–2008 (%)	2010–2012 (%)	2014–2016 (%)	2018–2020 (%)
20	22	16	5	3	1
30	25	19	7	4	2
50	28	24	11	6	4
50/20 *	28	23	10	6	4

* This combination refers to the use of a target of 50 μeq/L in eastern ecoregions and 20 μeq/L in western ecoregions.

[58] More specifically, the percentage of waterbodies across the contiguous U.S. estimated to exceed a CL for combined total S and N are very similar or just slightly higher (*e.g.,* by 1–2%) than S only percentages of the waterbodies estimated to not meet the ANC benchmarks. This indicates that most of the N deposition entering the watershed is retained within the watershed and/or converted to gaseous N (PA, Appendix 5A, section 5A.2.1).

The case study analyses provide estimates of S deposition (with associated uncertainties) that might be expected to allow these geographically diverse locations to meet the three ANC targets (20, 30 and 50 μeq/L). Focusing on the three eastern case studies, the CL modeling indicates that at an annual average S deposition of 9–10 kg/ha-yr, the sites in these areas, on average,[59] might be expected to achieve an ANC at or above 50 μeq/L. At an annual average S deposition of about 6–9 kg/ha-yr, 70% of the sites in the areas are estimated to achieve an ANC at or above 20 μeq/L and at about 5–8 kg S/ha-yr, 70% are estimated to achieve an ANC at or above 30 μeq/L. Lower S deposition values are estimated to achieve higher ANC across more sites. Across the three eastern areas, the CL estimates for each ANC target are lowest for the White Mountains National Forest study area, and highest for the Shenandoah Valley study area.

The ecoregion-level analyses of ANC levels and deposition estimates for the five periods from 2001–2003 through 2018–2020 illustrate the spatial variability and magnitude of the findings for several target ANC levels (50, 30 and 20 μeq/L) and the temporal changes across the 20-year period, as described in the PA, section 5.1.3.2. For example, during the two most recent 3-year periods, the ecoregion median S deposition estimates in 2014–16 were below 5 kg/ha-yr in all 25 ecoregions in the analysis and the estimates for 2018–20 were all below 4 kg/ha-yr (table 2). Although the ecoregion S deposition estimates in the 18 eastern ecoregions analyzed were all below 5 kg/ha-yr in the two most recent time periods (2014–16 and 2018–20), the full dataset of five time periods ranges from below 2 up to nearly 18 kg/ha-yr.

TABLE 2—SUMMARY OF ECOREGION MEDIANS DERIVED AS MEDIAN OF S DEPOSITION ESTIMATES AT CL SITES WITHIN AN ECOREGION

	Ecoregion median * total sulfur deposition (kg S/ha-yr)				
	2001–03	2006–08	2010–12	2014–16	2018–20
All 25 Ecoregions:					
Minimum	1.18	1.22	1.02	1.08	0.62
Maximum	17.27	14.44	7.25	4.58	3.88
Median	7.77	6.50	3.71	2.32	1.73
18 Eastern Ecoregions:					
Minimum	4.01	3.10	2.34	1.88	1.31
Maximum	17.27	14.44	7.25	4.58	3.88
Median	11.08	9.36	4.76	2.97	2.04
7 Western Ecoregions:					
Minimum	1.18	1.22	1.02	1.08	0.62
Maximum	1.94	1.83	1.47	1.56	1.19
Median	1.40	1.52	1.29	1.17	0.87

* The ecoregion medians for which descriptive statistics are presented here are medians of the deposition estimates across each ecoregion's waterbody sites with CL estimates.

The ecoregion-scale results (*e.g.,* percentage of waterbodies per ecoregion estimated to achieve the various ANC targets, or alternatively to exceed the associated CLs) for the 18 eastern and 7 western ecoregions are summarized in two ways. One approach, summarized further below, is framed by the temporal trends in deposition, and the second approach is in terms of ecoregion-time period combinations, using ecoregion deposition estimates (medians of deposition estimates at waterbodies with CLs in each ecoregion) as the organizing parameter. For example, table 3 presents the percentages of waterbody sites per ecoregion estimated to achieve the three ANC target levels, summarized by bins for different magnitudes of ecoregion median annual average S deposition (regardless of the 3-year period in which it occurred). For the 18 eastern ecoregions and five time periods, there are 90 ecoregion-time period combinations, and for each of these, there are waterbody percentages for each of the three ANC targets. In table 3, the combinations are binned by the ecoregion median S deposition associated with that ecoregion and time period. As can be seen from this table, fewer than half of the eastern ecoregion-time period combinations had an S deposition estimate at or below 4 kg/ha-yr (table 2).[60] Table 3 indicates that lower levels of S deposition are associated with improved ANC values and greater percentages of waterbodies expected to reach ANC targets. Across the ecoregion-time period dataset of CL exceedances for the three ANC targets for all 90 eastern ecoregion-time period combinations (for which ecoregion median S deposition was at or below 18 kg/ha-yr), 73% of the combinations had at least 90% of waterbodies per ecoregion estimated to achieve ANC at or above 20 μeq/L, and 60% had at least 90% of the waterbodies estimated to achieve ANC at or above 50 μeq/L (table 3). For S deposition estimates at or below 9 kg/ha-yr (approximately three quarters of the combinations), at least 90% of all waterbodies per ecoregion were estimated to achieve ANC at or above 20, 30 and 50 μeq/L in 87%, 81% and 72% of combinations, respectively. For S deposition estimates at or below 5 kg S/ha-yr (the lowest ecoregion median deposition bin that includes at least half of the full dataset), these values are 96%, 92% and 82% of combinations. For the 75 western ecoregion-time period combinations, all of which had an S deposition estimate below 4 kg/ha-yr, at least 90% of waterbodies per ecoregion were estimated to achieve an ANC at or above 50 μeg/L (table 3; PA, Table 5–5).

[59] The term ''average'' here refers to the average CL estimated for the specified ANC across all sites with CL estimates in each case study area (PA, Table 5–6).

[60] The ecoregion median S deposition in all seven of the western ecoregions in all five time periods were at or below 2 kg/ha-yr (PA, Table 5–4).

TABLE 3—PERCENTAGE OF ECOREGION-TIME PERIODS COMBINATIONS WITH AT LEAST 90, 85, 80, 75 AND 70% OF WATERBODIES ESTIMATED TO ACHIEVE AN ANC AT/ABOVE THE ANC TARGETS OF 20, 30 AND 50 μeq/L AS A FUNCTION OF ANNUAL AVERAGE S DEPOSITION FOR 18 EASTERN ECOREGIONS

[90 Ecoregion-time period combinations]

Total sulfur deposition (kg S/ha-yr) at/below:	Number of ecoregion-time periods	% Waterbodies per ecoregion-time period meeting specified ANC target														
		90%	85%	80%	75%	70%	90%	85%	80%	75%	70%	90%	85%	80%	75%	70%
		ANC target of 20 μeq/L					ANC target of 30 μeq/L					ANC target of 50 μeq/L				
2	10	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
3	29	100	100	100	100	100	100	100	100	100	100	97	100	100	100	100
4	41	100	100	100	100	100	95	100	100	100	100	93	98	100	100	100
5	51	96	98	100	100	100	92	98	100	100	100	82	94	96	98	100
6	59	93	98	100	100	100	88	98	100	100	100	78	93	97	98	100
7	63	92	98	100	100	100	87	97	100	100	100	78	92	95	98	100
8	67	87	94	100	100	100	82	91	99	100	100	73	87	93	96	100
9	69	87	94	100	100	100	81	91	99	100	100	72	87	93	96	100
10	73	85	92	99	99	99	78	89	97	99	99	70	85	92	95	99
11	76	83	91	97	99	99	76	88	96	99	99	68	83	91	95	99
12	79	81	89	95	96	97	73	86	94	96	96	66	81	89	92	96
13	81	80	88	95	96	98	73	85	94	96	96	65	80	88	93	96
14	84	77	86	93	95	96	70	83	92	94	95	63	79	86	90	94
15	86	76	84	91	93	95	69	81	90	92	93	62	77	84	88	92
16	88	75	83	90	92	94	68	81	89	91	92	61	76	83	88	91
17	88	75	83	90	92	94	68	81	89	91	92	61	76	83	88	91
18	90	73	81	88	90	92	67	79	87	89	90	60	74	81	86	89

Given the decreasing temporal trend in S deposition across all ecoregions, we also analyzed the aquatic acidification results at the ecoregion scale across the 20 years represented by the five time periods (2001–03, 2006–08, 2010–12, 2014–16, 2018–20) from a temporal perspective. With regard to percentages of waterbodies per ecoregion estimated to achieve the three ANC targets, an appreciable improvement is observed for the latter three time periods compared to the initial two time periods (*e.g.,* PA, Figure 5–13). By the 2010–2012 time period, more than 70% of waterbodies in all 25 ecoregions are estimated to achieve an ANC at or above 50 μeq/L and at least 85% are able to achieve an ANC at or above 20 μeq/L (Figure 1; PA, Table 7–2). By the 2014–2016 period, the percentages are 85% and nearly 90%, respectively. The median deposition for the CL sites in each of the 18 eastern ecoregions during the latter three time periods range from 1.3 kg S/h-yr to 7.3 kg S/h-yr and with each reduction in S deposition in each subsequent time period, more waterbodies in each of the eastern ecoregions are estimated to be able to achieve the ANC targets. Nearly 90% of the 18 eastern ecoregions are estimated to have at least 90% of their waterbodies achieving an ANC of 20 μeq/L in the 2010–12 period and achieving an ANC of 50 μeq/L in the 2014–16 period. When the 7 western ecoregions are included in a summary based on ANC targets of 20 μeq/L for the West and 50 μeq/L for the East,[61] over 70% of the full set of ecoregions are estimated to have at least 90% of their waterbodies achieving the ANC targets by the 2010–12 period. More than 90% of the ecoregions are estimated to have at least 90% of their waterbodies achieving the ANC targets by the 2014–16 period (Figure 1; PA, Table 7–2).

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[61] This combination of targets recognizes the naturally and typically low ANC levels observed in western waterbodies while also including a higher target for the East (as described in the PA, section 5.1.2.2).

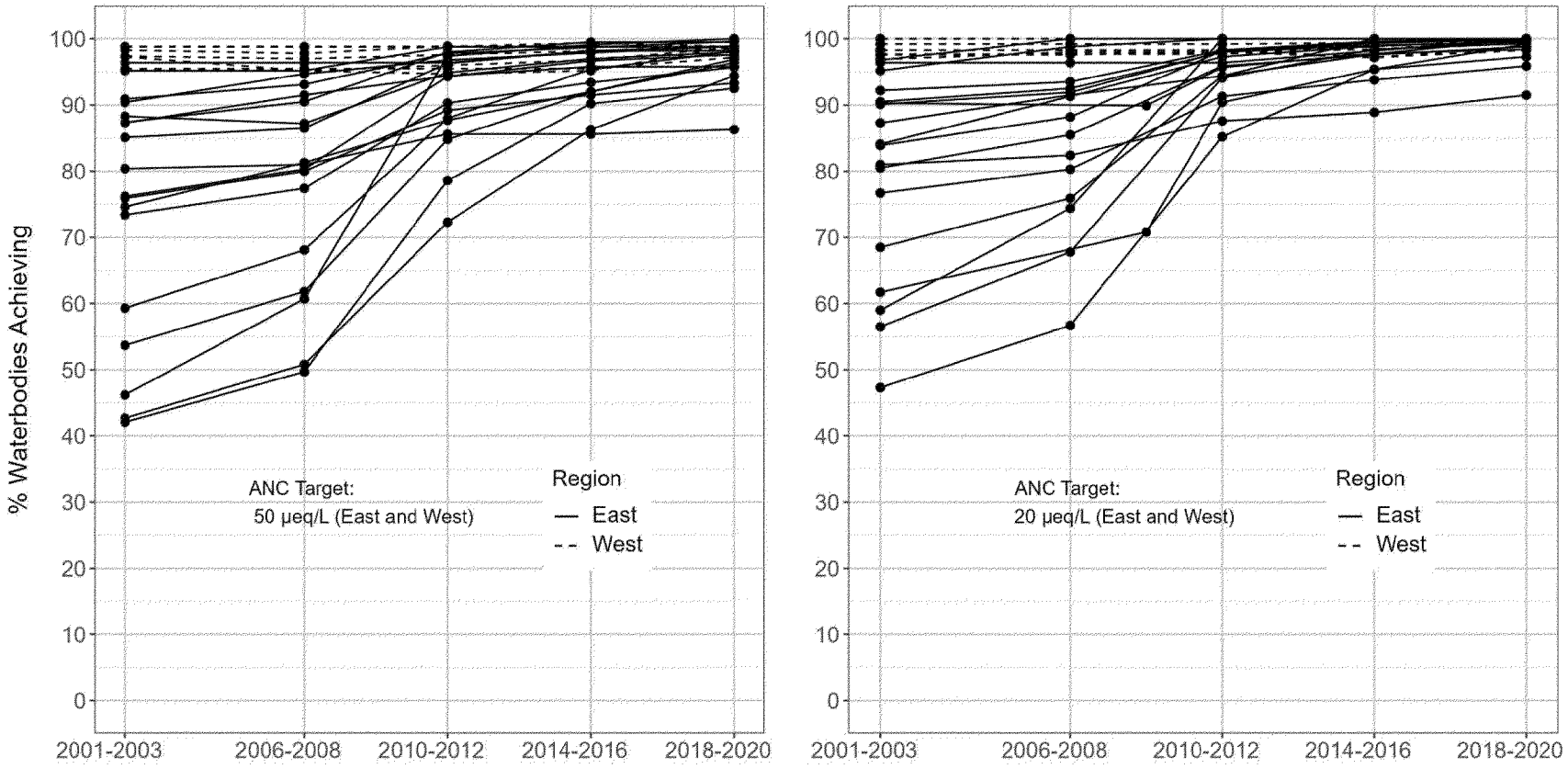


Figure 1. Percent of Waterbodies per Ecoregion Estimated to Achieve ANC at or Above 50 µeq/L (left panel) or 20 µeq/L (right panel). Western Ecoregions have Dashed Lines (Versus Solid Lines for Eastern Ecoregions). Each Line Represents One of the 25 Ecoregions.

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E. Proposed Conclusions

In reaching his proposed decision on the current secondary standards for SO_X, N oxides and PM (presented in section II.E.3), the Administrator has taken into account policy-relevant, evidence-based and air quality-, exposure- and risk-based considerations discussed in the PA (summarized in section II.E.1), as well as advice from the CASAC, and public comment on the standard received thus far in the review (section II.E.2). In general, the role of the PA is to help ''bridge the gap'' between the Agency's assessment of the current evidence and quantitative analyses of air quality, exposure, and risk, and the judgments required of the Administrator in determining whether it is appropriate to retain or revise the NAAQS. Evidence-based considerations draw upon the EPA's integrated assessment of the scientific evidence presented in the ISA (summarized in section II.C above) to address key policy-relevant questions in the review. Similarly, the air quality-, exposure- and risk-based considerations draw upon our assessment of air quality, exposure, and associated risk (summarized in section II.D above).

This approach to reviewing the secondary standards is consistent with requirements of the provisions of the CAA related to the review of the NAAQS and with how the EPA and the courts have historically interpreted the CAA. As discussed in section I.A above, these provisions require the Administrator to establish secondary standards that, in the Administrator's judgment, are requisite (*i.e.,* neither more nor less stringent than necessary) to protect the public welfare from known or anticipated adverse effects associated with the presence of the pollutant in the ambient air. Consistent with the Agency's approach across all NAAQS reviews, the EPA's approach to informing these judgments is based on a recognition that the available welfare effects evidence generally reflects a continuum that includes ambient air-related exposures for which scientists generally agree that effects are likely to occur through lower levels at which the likelihood and magnitude of response become increasingly uncertain. The CAA does not require the Administrator to establish secondary standards at a zero-risk level, but rather at levels that reduces risk sufficiently so as to protect the public welfare from known or anticipated adverse effects.

The proposed decision on the secondary standards for SO_X, N oxides and PM described below is a public welfare policy judgment by the Administrator that draws upon the scientific evidence for welfare effects, quantitative analyses of air quality, exposure, and risks, as available, and judgments about how to consider the uncertainties and limitations that are inherent in the scientific evidence and quantitative analyses. The four basic elements of the NAAQS (*i.e.,* indicator, averaging time, form, and level) have been considered collectively in evaluating the public welfare protection afforded by the current standards. The Administrator's final decision will additionally consider public comments received on this proposed decision.

1. Evidence- and Exposure/Risk-Based Considerations in the Policy Assessment

The PA presents an evaluation of the evidence and quantitative analyses of air quality, exposure and potential risk related to ecological effects of SO_X, N oxides and PM. These ecological effects include both direct effects of the three criteria pollutants on biota, and ecological effects of ecosystem deposition of N and S associated with these pollutants. Because the role of the PA is to provide the broadest array of options for consideration consistent with the scientific information, the PA presents multiple policy options for consideration by the Administrator in this review of the secondary NAAQS for SO_X, N oxides and PM. These options, which are only briefly summarized here, are discussed in detail in section 7.4 of the PA, including with regard to the varying strength of support provided for each by the current evidence and quantitative analyses. For SO_X, the PA options identified include adoption of an annual average SO_2 standard, averaged over three years, with a level within the range extending below 15 ppb and down to 5 ppb. Based on consideration of the available air quality analyses indicating that such an annual standard could be expected to also provide appropriate control for short-term concentrations, the PA recognizes options that would either revise the existing 3-hour secondary standard to an annual standard or augment it with an annual standard.

For N oxides and $PM_{2.5}$, the PA recognizes options for retention of the existing standards, without revision, and also options for revision, although with recognition of appreciable associated uncertainty. For N oxides, the PA recognizes the options of retaining the existing secondary NO_2 standard (with its annual average concentration of 53 ppb) or revising the existing standard level to within a range below 53 ppb to as low as 40–35 ppb, in combination with consideration of a form that entails averaging the annual average across three consecutive years. With regard to PM, the PA recognizes options of either retaining the existing suite of secondary standards or revising the current annual secondary $PM_{2.5}$ standard level to within a range below 15 $\mu g/m^3$ to as low as 12 $\mu g/m^3$.

The PA additionally considered the potential for establishment of a revised secondary standard or suite of standards with alternate indicator(s) that might target specific chemicals that deposit N and S (*e.g.,* particulate NO_3^-, SO_4^{2-}, NH_4^+), but recognized there to be a number of associated uncertainties and complications that include uncertainties in relationships between concentrations near sources and in areas of deposition. Based on the currently available data and analyses, the PA did not find there to be advantages or benefits to these alternate indicators over those for the established indicators, while also noting that establishing a standard based on one or more of these indicators would require the establishment of new or updated regulatory monitoring networks and measurement methods that would require additional time and resources (PA, sections 7.2 and 7.4).

The PA additionally recognizes that, as is the case in NAAQS reviews in general, decisions by the Administrator on the adequacy of existing standards or the appropriateness of new or revised standards will depend on a variety of factors, including science policy judgments and public welfare policy judgments. These factors include public welfare policy judgments concerning the appropriate benchmarks on which to place weight, as well as judgments on the public welfare significance of the effects that have been observed at the exposures evaluated in the welfare effects evidence. The factors relevant to judging the adequacy of the standard also include the interpretation of, and decisions as to the weight to place on, different aspects of the quantitative REA and air quality-deposition information and analyses, and associated uncertainties. Thus, the Administrator's conclusions regarding the secondary standards for SO_X, N oxides and PM will depend in part on public welfare policy judgments, science policy judgments regarding aspects of the evidence and exposure/risk estimates, and judgments about the level of public welfare protection that is requisite under the Clean Air Act.

The subsections below summarize key considerations from the PA. These focus first on consideration of the evidence, as evaluated in the ISA (and supported by the prior ISA and AQCDs), including

that newly available in this review, and the extent to which it alters the EPA's overall conclusions regarding ecological effects of SO_X, N oxides and PM, both regarding direct effects on biota and regarding ecological effects of ecosystem deposition of N and S compounds. The PA also considers the available information related to the general approach or framework in which to evaluate public welfare protection of the standard. Additionally, the PA considers the currently available quantitative information regarding environmental exposures likely to occur in areas of the U.S. where the standards are met. In so doing, the PA considers associated limitations and uncertainties, and the significance of these exposures with regard to the potential for effects, their potential severity and any associated public welfare implications. The PA also considers judgments about the uncertainties inherent in the scientific evidence and quantitative analyses that are integral to consideration of whether the currently available information supports or calls into question the adequacy of the current secondary standards.

a. Direct Effects on Biota

In considering the currently available evidence and quantitative information pertaining to ecological effects of SO_X, N oxides and PM in ambient air, other than those associated with ecosystem deposition of S and N, the PA focused on several aspects. These include the extent to which the newly available information alters our scientific understanding of the ecological effects of SO_X, N oxides and PM in ambient air; the extent to which the currently available information indicates the potential for exposures associated with ecological effects under air quality meeting the existing standards and whether such effects might be of sufficient magnitude, severity, extent and/or frequency such that they might reasonably be judged to be adverse to public welfare; and to what extent important uncertainties identified in past reviews have been reduced and/or whether new uncertainties emerged. These considerations are summarized below, first for SO_X, followed by N oxides and then PM.

(1) Sulfur Oxides

As summarized in section II.C.1 above, the previously available evidence base describes the direct effects of SO_X in ambient air on vegetation and very little of the currently available information is newly available in this review. Among the gaseous SO_X—which include SO, SO_2, SO_3, and S_2O—only SO_2 is present in the lower troposphere at concentrations relevant for environmental considerations (ISA, Appendix 2, section 2.1). Sulfate is the prominent S oxide present in the particulate phase. The available evidence, largely comprising studies focused on SO_2, documents the effects of SO_2 on vegetation, including foliar injury, depressed photosynthesis and reduced growth or yield (ISA, Appendix 3, section 3.2). The newer studies continue to support the determination that the evidence is sufficient to infer a causal relationship between gas-phase SO_2 and injury to vegetation (ISA, section 3.6.1).

In general, direct effects on plants occur at SO_2 exposures higher than a 3-hour average concentration of 0.5 ppm (500 ppb). The evidence derives from a combination of laboratory studies and observational studies. With regard to the sensitive effect of foliar injury, the current ISA finds ''no clear evidence of acute foliar injury below the level of the current standard'' (ISA, p. IS–37). Further, the ''limited new research since 2008 adds more evidence that SO_2 can have acute negative effects on vegetation but does not change conclusions from the 2008 ISA regarding . . . the SO_2 levels producing these effects'' (ISA, p. IS–37).

Uncertainties associated with the current information are generally similar to those existing at the time of the last review. In large part, these uncertainties relate to limitations of experimental studies in reflecting the natural environment and limitations of observational studies in untangling effects of SO_2 from those of other pollutants that may have influenced the analyzed effects. Regardless of these uncertainties, the evidence indicates effects are generally associated with air concentrations and durations not expected to occur when the existing standard is met (PA, section 7.1.1; ISA, Appendix 2, section 2.1)

(2) Nitrogen Oxides

The currently available information on direct effects of gaseous N oxides in ambient air is composed predominantly of studies of NO_2 and HNO_3, and also of PAN, with regard to effects on plants and lichens (as summarized in section II.C.1 above). The very few studies newly available in this review do not alter our prior understanding of effects of these N oxides, which include visible foliar injury and effects on photosynthesis and growth at exposures considered high relative to current levels in ambient air (ISA, section 3.3). Thus, as in the last review, the ISA again concludes that the body of evidence is sufficient to infer a causal relationship between gas-phase NO, NO_2, and PAN and injury to vegetation (ISA, section IS.4.2).

With regard to NO_2 ambient air exposure concentrations, the newly available information does not alter prior conclusions regarding exposure conditions associated with visible injury and effects on plant photosynthesis or growth. The 1993 AQCD for N oxides concluded that concentrations of NO, NO_2, and PAN in the atmosphere are rarely high enough to have phytotoxic effects on vegetation, and since that document, very little new research has been performed on these phytotoxic effects at concentrations currently observed in the U.S. (ISA, Appendix 3, sections 3.3 and 3.6.2; U.S. EPA, 1993). Further, there is ''little evidence in recent years to suggest that PAN poses a significant risk to vegetation in the U.S.'' (ISA, Appendix 3, p. 3–13).

Regarding another N oxide compound, HNO_3, in ambient air, the previously available evidence included experimental studies of leaf cuticle damage in tree seedlings, a finding confirmed in a more recent study, and also studies of effects on lichens. Effects of HNO_3 may be related to vapor exposures or direct contact via deposition (PA, section 7.1.2; ISA, Appendix 3, section 3.4). The evidence also includes studies of effects related to historic conditions in the Los Angeles Basin that indicate N oxides, and particularly HNO_3, to be ''the main agent of decline of lichen in the Los Angeles [B]asin'' (ISA, Appendix 3, p. 3–15). A reassessment in 2008 found that lichen communities have not recovered from the damage evident in the 1970s, although the extent to which this reflects residual impacts of earlier effects is unknown (PA, section 7.1.2; ISA, Appendix 3, section 3.4). The newer studies continue to support the findings of the 2008 ISA, such that as in the last review, the ISA again concludes ''the body of evidence is sufficient to infer a causal relationship between gas-phase HNO_3 and changes to vegetation'' (ISA, section 4.3).

The recently available information for HNO_3 includes effects on tree foliage under controlled 12-hour exposures to 50 ppb HNO_3 (approximately 75 $\mu g/m^3$) and in longer, 32- or 33-day exposures in which peak HNO_3 concentrations for the ''moderate'' treatment (30–60 μg/m3) encompassed the range reported in summers during the 1980s in the Los Angeles Basin (ISA, Appendix 3, section 3.4). During that period, NO_2 concentrations in the Basin ranged up to 0.058 ppm, exceeding the secondary standard (PA, section 5.4.2; U.S. EPA,

1987). Effects on lichen photosynthesis have been reported from daily 6.5-hour varying exposures with peaks near 50 ppb (~75 μg/m^3) lasting longer than 18 days (ISA, Appendix 6, section 6.2.3.3; Riddell et al., 2012).

In considering the potential for concentrations of N oxides, including HNO_3, that are associated with ecological effects to occur under air quality conditions meeting the current NO_2 standard, the PA noted that air quality at all ambient air monitoring sites in the contiguous U.S. has met the existing secondary NO_2 standard since around 1991 (PA, Figure 2–22). In considering the potential for HNO_3 concentrations of a magnitude sufficient to pose risk of effects to occur under conditions that meet the current NO_2 secondary standard, the PA also considered the magnitude of NO_2 concentrations in the Los Angeles Basin. During the 1970s to 1990s, the Los Angeles metropolitan area experienced NO_2 concentrations in excess of the NO_2 secondary standard (*e.g.,* annual average concentrations up to 0.078 ppm in 1979 and above 0.053 ppm into the early 1990s). At the time of the 2008 reassessment mentioned above, which reported that impacts documented on lichen communities in the 1970s still remained, NO_2 concentrations were well below the standard (PA, section 7.1.2; ISA, Appendix 3, section 3.4), although the extent to which this finding relates to a lag in recovery or concurrent air pollutant concentrations is unknown. The PA notes that the risk of HNO_3 effects to lichens may be from both direct and deposition-related exposure related to direct contact of the chemical to the lichen surfaces (PA, section 7.1.2).

In summary, the currently available information is somewhat limited with regard to the extent to which it informs conclusions on the potential for ambient air exposures associated with ecological effects under air quality meeting the existing NO_2 secondary standard. More recent studies also indicate variation in eutrophic lichen abundance to be associated with variation in metrics representing N deposition, although the extent to which these associations are influenced by residual impacts of the historic air quality is unclear (ISA, Appendix 6, section 6.2.3.3; PA, sections 5.3.3.2 and 7.1.2). While new uncertainties have not emerged, uncertainties remain in our interpretation of the evidence, including those related to limitations and associated uncertainties of the various study types. A key uncertainty affecting interpretation of studies of historic conditions in the LA Basin relates to the extent to which other air pollutants or local conditions may have contributed to the observations. With regard to the risk posed by N oxides, and particularly HNO_3, the evidence summarized in the ISA indicates the potential for effects on lichen species related to air quality occurring during periods when the current secondary standard was not met. The evidence is limited, however, in support of conclusions of effects under conditions meeting the current standard (PA, section 7.1.2).

(3) Particulate Matter

As summarized in section II.C above, the evidence for ecological effects of PM is consistent with that available in the last review. The causal determinations with regard to ecological effects of PM in the 2013 p.m. review (2009 p.m. ISA) and in this review (2020 ISA) focused on effects associated with PM loading (*e.g.,* to leaf surfaces), rather than direct effects of PM suspended in ambient air. In this review, as in the last one, the ecological effects evidence was found to be sufficient to conclude there is likely to exist a causal relationship between deposition of PM and a variety of effects on individual organisms and ecosystems (ISA, Appendix 15; 2012 p.m. ISA, section 9.4).

With regard to direct effects of PM in ambient air, the available information indicates effects occurring only at ambient air concentrations well in excess of the existing secondary standards. While some uncertainties remain, new uncertainties have not emerged since the last review. In summary, little information is available on effects of PM under generally lower PM concentrations in ambient air likely to occur under conditions meeting the current secondary standards, and the limited available information does not indicate effects to occur under those conditions (PA, section 7.1.3).

b. Evidence of Ecosystem Effects of S and N Deposition

The evidence base of ecological effects related to atmospheric deposition of N and S compounds has expanded since the last review, as summarized above, and continues to be strong in documenting roles of SO_X, N oxides and PM (including N and S compounds) in aquatic acidification, nutrient enrichment and other effects, as summarized in section II.C.1 above. A long-standing evidence base documents the array of effects of both acidic deposition in aquatic and terrestrial ecosystems and ecosystem N enrichment. The evidence for acid deposition effects, extending back many decades, has accrued in part through study of ecosystem acidification that has resulted from many decades of acidifying deposition (ISA, section ES.5.1 and Appendix 4, section 4.6). As noted in section II.C and II.D above, both S and N compounds have contributed to ecosystem acidification, with relative contributions varying with emissions, air concentrations, and atmospheric chemistry, among other factors. Ecological effects have been documented comprehensively in waterbodies of the Adirondack and Appalachian Mountains, and in forests of the Northeast, at the organism to ecosystem scale. With regard to N enrichment, research on its effects in estuaries and large river systems across the U.S. extends back at least four decades, and there is longstanding evidence of effects in estuaries along the East and Gulf Coasts of the U.S., as summarized in more detail in Chapters 4 and 5 of the PA (ISA, Appendix 7, section 7.2.9; 2008 ISA, section 3.3.2.4; Officer et al., 1984). Additionally, the evidence base on the effects of N enrichment in terrestrial ecosystems, primarily in grassland and forested ecosystems, includes evidence that was available in the last review (*e.g.,* 2008 ISA, sections 3.3.3 and 3.3.5).

Some uncertainties associated with the evidence available in the 2012 review remain, and some additional important uncertainties have been identified. In addition to uncertainties related to the specific air quality circumstances associated with effects (*e.g.,* magnitude, duration, and frequency of concentrations associated with effects), there are also uncertainties associated with the effects of N and S deposition expected under changing environmental circumstances. Such uncertainties include atmospheric loading that has declined since 2000, with associated changes to soil and waterbody biogeochemistry and meteorological changes associated with changing climate (ISA, section IS.12; PA section, 7.2.1). The PA also recognizes important uncertainties associated with the various assessment approaches employed by different study types (PA, sections 5.3 and 7.2.1). For example, uncertainties associated with observational studies include uncertainty regarding the potential influence of historical deposition on species distribution, richness, and community composition observed in recent times (ISA, section IS.14.2.1). Additionally, there are uncertainties contributed by variation in physical, chemical, and ecological responses to N and S deposition, and by the potential influence of unaccounted-for stressors

on response measures. Uncertainties associated with addition experiments[62] include, among others, those related to the potential for effects to occur over longer periods than those assessed in those studies (PA, section 5.3.4.1).

Lastly, studies reporting atmospheric deposition rates associated with effects involve authors' judgments regarding the magnitude of responses considered to be effects, and may also be limited by a lack of clarity as to references or baselines from which responses are assessed and with regard to judgments associated with reference or baseline conditions. As noted in the ISA, ''[t]he majority of studies that evaluate terrestrial N CLs for N enrichment effects are based on observed response of a biological receptor to N deposition (or N addition as a proxy for deposition), without a known soil chemistry threshold that causes the biological effect'' (ISA, p. IS–113).[63] Variability in physical, chemical, and ecological characteristics of ecosystems also contribute uncertainty to such judgments (PA, section 7.2.1).

In sum, a wealth of scientific evidence, spanning many decades, demonstrates effects of acidifying deposition associated with N and S compounds in aquatic and terrestrial ecosystems (ISA, sections ES.5.1, IS.5.1, IS.5.3, IS.6.1 and IS.6.3; 2008 ISA, section 3.2; U.S. EPA, 1982b, Chapter 7). This evidence base supports conclusions also reached in the 2008 ISA (for the review completed in 2012) of causal relationships between N and S deposition and alteration of soil and aquatic biogeochemistry, alteration of the physiology and growth of terrestrial organisms and of associated productivity, changes in aquatic biota, including physiological impairment, and alteration of species richness, community composition, and biodiversity in both aquatic and terrestrial ecosystems (ISA, Table ES–1). Similarly, a robust evidence base demonstrates effects of N enrichment in both estuarine and freshwater ecosystems, supporting conclusions also reached in the last review of a causal relationship between N deposition and changes in biota, including altered growth and productivity, and alteration of species richness, community composition and biodiversity due to N enrichment (ISA, sections ES.5.2, IS.6, and IS.7, and Table ES–1). Additional effects of N deposition in wetlands, also recognized in the last review, include alteration of biogeochemical cycling, growth, productivity, species physiology, species richness, community composition, and biodiversity (ISA, Table ES–1).

In terrestrial ecosystems, as in the last review, the now expanded evidence base supports determination of a causal relationship between N deposition and alteration of species richness, community composition, and biodiversity (ISA, Table ES–1). The ISA additionally determines there to be a causal relationship for alteration of the physiology and growth of terrestrial organisms and associated productivity, a category of effects not included in the 2008 ISA (ISA, Table ES–1). Other evidence of effects causally associated with S deposition in wetland and freshwater ecosystems includes that related to chemical transformation and associated toxicity, most specifically alteration of mercury methylation, which was also recognized in the last review. The other category of effects, not included in the last review, is related to sulfide phytotoxicity and its associated effects in wetland and freshwater ecosystems (ISA, Table ES–1).

Thus, while an array of effects is associated with S and N deposition, information important for quantitative analysis varies across the array. For some categories of effects (*e.g.,* sulfide phytotoxicity) the information is limited and/or quite variable across locations with regard to environmental levels relating to effects, thus hindering analysis. For others, information is limited and/or quite variable, with regard to its linkages to the criteria pollutants. The information with clearest implications to NAAQS decisions pertains to SO_X and S deposition-related ecosystem acidification. While the information regarding effects associated with N loading to ecosystems is extensive, information to support quantitative analysis to inform NAAQS decisions regarding N oxides and PM is not clear, with multiple complicating factors. Such factors include contributions from other, non-criteria pollutants, such as NH_3. As noted in section II.D above, the role of N deposition in aquatic acidification is considered in the REA. With regard to other N deposition-related effects of N oxides and PM, the information does not provide effective support for such analysis, independent of effects from other (non-criteria) pollutants, or, in some cases, from other (non-air) sources.

c. Sulfur Deposition and SO_X

Evidence- and exposure/risk-based considerations discussed in the PA pertaining to S deposition and SO_X in ambient air are summarized in the subsections below. These considerations reflect discussion in the PA, which draws on the available welfare effects evidence described in the current ISA, the 2008 NO_X/SO_X ISA, the 2009 p.m. ISA, and past AQCDs, as well as information available from quantitative analyses (summarized in Chapters 5 and 6 of the PA), both analyses recently developed and those available from the 2009 REA.

In considering potential public welfare protection from S deposition-related effects in aquatic ecosystems (in light of the aquatic acidification REA results summarized in II.D above), the PA notes as an initial matter, the integral role of watersheds in aquatic ecosystem health (*e.g.,* ISA, Appendix 8, section 8.1 and Appendix 16, section 16.4.2) and the effects of acidic deposition on forested areas in the watersheds that are distinct from effects in water bodies (*e.g.,* reduced tree growth and survival). Further, as discussed in section II.C.2 above, there are an array of benefits of watershed forested areas to the public, including such ecosystem services as silviculture, drinking water supply protection, recreational uses. In light of these public benefits, the PA recognizes the public welfare implications of various effects of acidifying deposition on the natural resources in these areas, with the public welfare significance dependent on the severity and extent of such effects. Given the more extensive quantitative analyses for aquatic acidification in this review, the PA discusses the public welfare implications of S deposition-related effects in aquatic ecosystems with an eye toward their prominence for decision-making in this review (PA, sections 4.5 and 7.2.2.2). In so doing, the PA judges that in focusing on public welfare protection from aquatic acidification-related effects will provide protection from watershed soils, and

[62] Addition experiments generally refers to field experiments where compounds (*e.g.,* NO_3^- or SO_4^{2-} in acidification experiments) are added (generally annually) to the soil of large forested (for tree studies) areas and the tree measurements (*e.g.,* growth rate) are compared to those in an untreated or control area.

[63] In describing critical loads developed from observational studies (or empirical data), the ISA recognizes distinctions from other studies, as seen in the following excerpt (ISA, p. IS–113). The majority of studies that evaluate terrestrial N CLs for N enrichment effects are based on observed response of a biological receptor to N deposition (or N addition as a proxy for deposition), without a known soil chemistry threshold that causes the biological effect. In contrast, CLs for acidification are typically based on the deposition amount that gives rise to a soil chemical indicator value which is known to cause an adverse biological effect. The link between soil chemical indicator and biological effect is based on empirical evidence (Appendix 5). The relationship between deposition and the biogeochemistry that causes effects on soil chemistry is typically modeled (Appendix 4; section IS.14.2).

accordingly, for associated watershed resources.

The PA notes that, as also recognized in the 2012 review, aquatic ecosystems provide a number of services important to the public welfare, ranging from recreational and commercial fisheries to recreational activities engaged in by the public (77 FR 20232, April 3, 2012). Because aquatic acidification primarily affects the diversity and abundance of aquatic biota, it also affects the ecosystem services that are derived from the fish and other aquatic life found in these surface waters (PA, section 4.5; ISA, Appendix 14, section 14.3.1). Fresh surface waters support several cultural services, such as aesthetic and educational services; the type of service that is likely to be most widely and significantly affected by aquatic acidification is recreational fishing, with associated economic and other benefits. Other potentially affected services include provision of food for some recreational and subsistence fishers and for other consumers, as well as non-use services, including existence (protection and preservation with no expectation of direct use) and bequest values (PA, section 4.5).

The PA recognizes that some level of S deposition and associated risk of aquatic acidification, including those associated with past decades of acidifying deposition in the Northeast, can impact the public welfare and thus might reasonably be judged adverse to the public welfare. Depending on magnitude and the associated impacts, there are many locations in which S deposition and associated aquatic acidification can adversely affect the public welfare. For example, there is evidence in some waterbodies that aquatic acidification resulting in reduced acid buffering capacity can adversely affect waterbodies and associated fisheries, which in addition to any commercial ramifications can have ramifications on recreational enjoyment of affected areas (PA, sections 5.1.1 and 4.5). The evidence is less clear as to what level of risk to an aquatic system, in terms of estimates for achieving various ANC targets across sites within an ecoregion, might be judged of public welfare significance.

In other secondary NAAQS reviews, the EPA's consideration of the public welfare significance of the associated effects has recognized a particular importance of Class I areas and other similarly protected areas. Accordingly, we note that waterbodies that have been most affected by acidic deposition are in the eastern U.S., including in several Class I areas and other national and state parks and forests (PA, section 5.1.2.1).[64] Two waterbodies in such areas were included as case studies in the aquatic acidification REA: Shenandoah Valley Area and Rocky Mountain National Park (PA, section 5.1.3.3). While assuring continued improvement of affected waterbodies throughout the U.S. (*e.g.,* through lower S deposition than the levels of the past) may reasonably be considered to be of public welfare importance, it is particularly important in Class I and similarly protected areas. In this review, in considering the potential public welfare significance of aquatic acidification effects of differing levels of S deposition, the PA summarizes the REA ecoregion-scale results in terms of percentages of ecoregions in which differing percentages of waterbodies are estimated to achieve the three acid buffering capacity targets. The PA summarized results in this way to inform identification of S deposition estimates in the context of potential policy options.

The first subsection below (II.E.1.c(1)) focuses on the aquatic acidification REA analyses (summarized in section II.D above), considering first their use of ANC as the indicator of acidification risk, then evaluating the exposure/risk estimates as to what they indicate about acidification risks in freshwater streams and lakes of the contiguous U.S. for S deposition rates estimated to have occurred over the past two decades (much of which is newly assessed in this review),[65] and lastly identifying important uncertainties associated with the estimates. Section II.E.1.c(2) considers the evidence and quantitative exposure/risk information from a public welfare protection perspective, focusing first on what might be indicated regarding deposition conditions under which waterbodies in acid-sensitive ecoregions might be expected to achieve acid buffering capacity of interest and what the available information indicates pertaining to the consideration of public welfare protection from S deposition related effects in aquatic ecosystems. Lastly, section II.E.1.c(2) considers what the published quantitative information regarding S deposition and terrestrial acidification indicates regarding deposition levels of potential concern, along with associated uncertainties in this information. Section II.E.1.c(3) then summarizes considerations in relating SO_X air quality metrics to deposition of S compounds.

(1) Quantitative Information for Ecosystem Risks Associated With S Deposition

As in the last review, we give primary attention to the quantitative assessment of aquatic acidification (including particularly that attributable to S deposition). While noting the uncertainties associated with results of the aquatic acidification REA, as summarized in section II.D.2 above, the PA recognized these results to be informative to the identification of S deposition levels associated with potential for aquatic acidification effects of concern, as summarized below. This assessment of quantitative linkages between S deposition and potential for aquatic acidification is one component of the approach implemented in the PA for informing judgments on the likelihood of occurrence of such effects under differing air quality conditions.

Although the approaches and tools for assessing aquatic acidification have often been applied for S and N deposition in combination, the approach taken in the REA for this review is focused on S deposition. This focus is supported by analyses in the PA indicating the relatively greater contribution of S deposition than N deposition to aquatic acidification risk under the more recent air quality conditions that are the focus of this review (PA, Appendix 5A). As summarized in section II.D above, the aquatic acidification assessment has relied on well-established site-specific water quality modeling applications with a widely recognized indicator of aquatic acidification, ANC.

Quantitative tools are also available for the assessment of terrestrial acidification related to S deposition, as they were in the last review, and the findings from these analyses presented in the 2009 REA have been considered in this review in the context of more recently available evidence (PA, section 5.3.2.1; 2009 REA, section 4.3).[66] In the last review, analyses that related estimated atmospheric deposition of acidic N and S compounds (for early 2000s time period) to terrestrial effects, or indicators of terrestrial ecosystem risk, were generally considered to be more uncertain than conceptually similar modeling analyses for aquatic

[64] A comparison of Figures 4–4 and 5–6 of the PA indicates multiple Class I areas in ecoregions considered acid sensitive.

[65] Aquatic acidification risk analyses in the last review considered deposition estimates for 2002 and 2006 derived from CMAQ modeling, 2002 emissions estimates (2009 REA, Appendix 1).

[66] Given findings from the 2009 REA that aquatic acidification provided a more sensitive measure for use in assessing deposition related to ecosystem acidification, and consideration of recent information not likely to result in a different finding, the REA for the current review focused on aquatic acidification.

ecosystems. For example, the 2009 REA concluded that ''aquatic acidification is clearly the targeted effect area with the highest level of confidence'' (2009 REA, section 7.5; 2011 PA, section 1.3). Additionally, the PA for this review notes that quantitative tools and approaches are not well developed for other ecological effects associated with atmospheric deposition of S compounds, such as mercury methylation and sulfide toxicity in aquatic systems (PA, sections 4.2.3.1 and 4.2.3.2).

As described in sections II.C and II.D above, ANC is an indicator of susceptibility or risk of acidification-related effects in waterbodies, with lower levels indicating relatively higher potential for acidification and related waterbody effects. The support for this relationship is strongest in aquatic systems low in organic material, and the evidence comes predominantly from historically affected waterbodies in the eastern U.S. (*e.g.,* in the Adirondack Mountains) and Canada. In waterbodies with relatively higher levels of dissolved organic material, the presence of organic acid anions contributes to reduced pH, but also creates complexes with dissolved aluminum that protect resident biota against aluminum toxicity (ISA, Appendix 8, section 8.3.6.2; PA, section 7.2.2.1). Accordingly, biota in such systems tolerate lower ANC values (and pH) than biota in waterbodies with low dissolved organic carbon. Thus, while the evidence generally supports the use of ANC as an acidification indicator and for purposes of judging a potential for ecosystem acidification effects generally, the relationship with risk differs depending on the presence of naturally occurring organic acids, which also affects the responsiveness of ANC to acidifying deposition in these areas. For these reasons, in some areas, ANC is less well supported as an indicator for acidic deposition-related effects (and waterbodies are less responsive to changes in acidic deposition) due to dissolved organic material; these areas include the Middle Atlantic Coastal Plain, Southern Coastal Plains, and Atlantic Coastal Pine Barrens ecoregions (PA, section 5.1.2.2).

The PA considers the available evidence to provide strong support for use of ANC for purposes of making judgments regarding risk to aquatic biota in streams impacted by acidifying deposition, and for consideration of the set of targets analyzed in the aquatic acidification REA: 20, 30, and 50 μeq/L (PA, section 5.1). There is longstanding evidence of an array of impacts on aquatic biota and species richness reported in surface waters with ANC values below zero and in some historically impacted waterbodies with ANC values below 20 μeq/L (PA, section 5.1.2.2). The severity of impacts is greatest at the lowest ANC levels. This evidence derives primarily from lakes and streams of the Adirondack Mountains and areas along the Appalachian Mountains. As recognized in the 2012 review, in addition to providing protection during base flow situations, ANC is a water quality characteristic that affords protection against the likelihood of decreased pH from episodic events in impacted watersheds. For example, some waterbodies with ANC below 20 μeq/L have been associated with increased probability of low pH events, that, depending on other factors as noted above, may have potential for reduced survival or loss of fitness of sensitive biota or lifestages (2008 ISA, section 5.1.2.1). In general, the higher the ANC level above zero, the lower the risk presented by episodic acidity. In summarizing and considering the acidification risk estimates for the different scales of analysis (national, ecoregion and case study) and using the water quality modeling-based CLs derived for three different ANC targets (20, 30 and 50 μeq/L), the PA recognizes both the differing risk that might be ascribed to the different ANC targets, as well as the variation in ANC response across waterbodies that may be reasonable to expect with differences in geology, history of acidifying deposition, and in patterns of S deposition. Further, the PA recognizes limitations and uncertainties in the use of ANC as an indicator for model-based risk assessments as noted above (PA, section 7.2.2.1).

The REA national-scale analysis of more than 13,000 waterbody sites in 69 ecoregions demonstrated an appreciable reduction in risk over the 20-year period of analysis (PA, section 5.1.3). For the 2001–2003 period, more than 20% of waterbodies analyzed nationally were estimated to be unable to achieve an ANC of 20 μeq/L or greater based on S deposition estimates (table 1 above). This percentage declines significantly by the 2010–2012 period, and by the 2018–20 period, only 1% and 4% of waterbodies analyzed nationally were estimated to be unable to achieve or exceed ANC targets of 20 μeq/L and 50 μeq/L, respectively (table 1). The 25 ecoregions included in the ecoregion-scale analyses (*i.e.,* 18 in the East and 7 in the West in which there are at least 50 waterbody sites with CL estimates) are dominated by ecoregions categorized as acid sensitive (PA, Table 5A–5) and excludes the three ecoregions identified above as having natural acidity related to organic acids [67] (PA, section 5.1.2.1). The ecoregion-scale results across the 20-year period reflect the results at the national scale, but the percentages of waterbodies not able to meet the ANC targets are higher than the national percentages due to the dominance of the acid-sensitive ecoregions among the 25 analyzed in the ecoregion-scale analysis. Specifically, in the most affected ecoregion (Central Appalachians), more than 50% of waterbodies were estimated to be unable to achieve an ANC of 20 μeq/L or greater based on S deposition estimates for the 2001–2003 period; the percentage was close to 60% for an ANC target of 50 μeq/L (Figure 1 above, and PA, Figure 5–13). By the 2018–2020 period, less than 10% of waterbodies in any of the 25 ecoregions (and less than 5% in all but one) were estimated to be unable to achieve an ANC of 20 μeq/L and less than 15% of waterbodies in the most affected ecoregion were estimated to be unable to achieve an ANC of 50 μeq/L (Figure 1 above and PA, Figure 5–13).

The PA recognizes uncertainty associated with two overarching aspects of the aquatic acidification REA (PA, section 5.1.4 and Appendix 5A, section 5A.3). The first relates to interpretation of specific thresholds or benchmark concentrations of ANC with regard to aquatic acidification risk. The second relates to our understanding of the biogeochemical linkages between deposition of S and N compounds and waterbody ANC (which is reflected in the modeling employed), and the associated estimation of CLs. With regard to interpretation of ANC thresholds, while ANC is an established indicator of aquatic acidification risk, there is uncertainty in our understanding of relationships between ANC and risk to native biota, particularly in waterbodies in geologic regions prone to waterbody acidity. Such uncertainties relate to a number of factors, including the varying influences of site-specific factors other than ANC. These other site-specific factors include prevalence of organic acids in the watershed, as well as historical loading to watershed soils that can influence acidity of episodic high-flow events (PA, sections 5.1.4 and 7.2.2.1 and Appendix 5A, section 5A.3). There are also uncertainties associated with the estimates of S deposition used in the analyses of CL exceedances, including those for the national- and ecoregion-scale analyses (PA, section 6.3.1, Table

[67] The natural acidity contributes to a reduced responsiveness to changes in acidic deposition.

6–13). Consideration of such uncertainties informs the weighing of the findings of the quantitative analyses. For example, there is more uncertainty associated with CLs in areas that are less well studied. Thus, the PA suggests that it is appropriate to put greater emphasis on the more well studied areas and/or less emphasis on estimates for the tails of the distributions (*e.g.,* upper/lower percentiles) of waterbody exceedances within an ecoregion or case study area. This information additionally informs interpretation of the potential risk associated with estimates for the different ANC targets.

With regard to estimation of CLs for the different ANC targets, associated uncertainties, generally related to parameters used in the steady-state CL models, are difficult to characterize and assess. Such uncertainties contribute uncertainty to estimation of the ANC levels that individual waterbodies might be expected to achieve under different rates of S deposition. While the water quality models used for estimating aquatic acidification CL are well conceived and based on a substantial amount of research and applications available in the peer-reviewed literature, there is uncertainty associated with the availability of the necessary data to support certain model components (PA, Appendix 5A, section 5A.3). For example, as recognized in section II.D.2 above, the data to support the site-specific model inputs for some areas are more limited than others, with associated greater uncertainties (PA, sections 4.2.1.3 and 5.1.4).

Most particularly, the strength of the CL estimates and the exceedance calculation rely on the ability of models to estimate the catchment-average base-cation supply (*i.e.,* input of base cations from weathering of bedrock and soils and air), runoff, and surface water chemistry. The uncertainty associated with runoff and surface water parameters relates to measurement availability, which varies among waterbodies. The model input associated with estimating base cation catchment supply is the base cation weathering rate, which the ISA recognizes as ''one of the most influential yet difficult to estimate parameters in the calculation of critical acid loads of N and S deposition for protection against terrestrial acidification'' (ISA, section IS.14.2.2.1; Li and McNulty, 2007). Although the approach to estimate base-cation supply in the REA (*e.g.,* F-factor approach) has been widely published and analyzed in Canada and Europe, and has been applied in the U.S. (*e.g.,* Dupont et al., 2005 and others), the magnitude of uncertainty in this estimate is unclear and could be large in some cases. The REA's quantitative analysis of uncertainty in CL estimates indicates lower uncertainty associated with CLs estimated for sites with more extensive and longer-term water quality datasets and relatively low variability in the runoff measurements, such as CLs for waterbody sites in the eastern U.S., particularly along the Appalachian Mountains, in the Upper Midwest, and in the Rocky Mountains. The analysis found greater uncertainty associated with CLs estimated for sites in the Midwest and South and along the CA to WA coast (PA, Appendix 5A, section 5A.3.1).

(2) General Approach for Considering Public Welfare Protection

In discussing key considerations in judging public welfare protection from S deposition in the context of the review of the secondary standard for SO_X, the PA first focused on the results of the aquatic acidification REA as to what they indicated about deposition conditions under which waterbodies in sensitive ecoregions might be expected to achieve ANC levels of interest. In so doing, the PA focused on the results of the aquatic acidification REA at three scales: national-scale, ecoregion-scale and the more localized case study-scale, giving particular focus to the ecoregion and case-study analyses, which use the waterbody-specific comparisons of estimated deposition and waterbody CLs to provide ecoregion wide and cross-ecoregion summaries of estimated waterbody responses to ecoregion estimates of deposition. The PA also considered the extent to which waterbodies in each ecoregion analyzed were estimated to achieve ANC levels at or above each of the three targets in recognition of the variation in ANC response reasonably expected across waterbodies in an ecoregion based on both differences in watersheds that can affect sensitivity to S deposition and with different spatial or geographic patterns of S deposition.

At the national scale, as summarized in section II.E.1.c(1) above, unlike the case for the 2000–2002 period, few waterbodies are estimated to be receiving deposition in excess of their CLs for the three ANC targets under recent deposition estimates. For example, for S deposition estimates for the most recent time period (2018–2020), only 4% of waterbodies nationally were estimated to exceed CLs for an ANC of 50 μeq/L and 1% for an ANC of 20 μeq/L (table 1 above). In this time period (2018–2020), median estimates of deposition in all of the 69 ecoregions that are represented in these national-scale percentages (ecoregions with at least one site with a CL estimate) are at or below approximately 4 kg S/ha-yr (PA, Tables 5A–15 and 5A–11).

Based on the array of CL-based analyses, the PA provides a general sense of the ANC values that waterbodies in sensitive regions across the continental U.S. may be able to achieve, including for areas heavily affected by a long history of acidifying deposition, such as waterbodies in Shenandoah Valley. In the case study for that well studied area (4,977 sites distributed across three ecoregions), 90% of waterbody sites are estimated to be able to achieve an ANC at or above 20 μeq/L (focusing on S deposition only) with S deposition of 7.1 kg/ha-yr and 70% with S deposition of 9.4 kg/ha-yr (PA, section 5.1.3.3). For an ANC target at or above 50 μeq/L in the Shenandoah Valley case study, the corresponding deposition estimates are 4.1 and 6.3 kg/ha-yr (PA, Table 5–6). For the other case study areas (White Mountain National Forest, Northern Minnesota, Sierra Nevada Mountains and Rocky Mountain National Park), there are appreciably fewer waterbody sites for which modeling has been performed to estimate CLs, and accordingly greater uncertainty. Yet, the case study area averages of waterbody CLs for achieving ANC at or above each of the three targets (20, 30 or 50 μeq/L) is quite similar across the five case studies, ranging from 9.4 kg/ha-yr for an ANC of 50 μeq/L in Shenandoah Valley Area to 12 kg/ha-yr for an ANC of 20 μeq/L in both Shenandoah and Sierra Nevada Mountains case study areas (PA, Table 5–6).

Findings from the ecoregion-scale analyses of 25 ecoregions (18 East and 7 West), nearly all of which are considered acid sensitive, indicated ranges of deposition estimates associated with high percentages of waterbodies estimated to achieve the three ANC targets that are similar to the case study results immediately above. This was the case when considering the ecoregion-scale analysis results in both of the two ways they were presented: (1) in terms of ecoregion median deposition regardless of time period or ecoregion (ecoregion-time period combinations), and (2) in terms of temporal trends in S deposition and waterbody percentages achieving ANC targets.

For example, in the ecoregion-time period combinations presentation, at least 90% of waterbody sites in 87% of the eastern ecoregion-time period combinations are estimated to be able to achieve an ANC at or above 20 μeq/L with ecoregion median S deposition at

or below 9 kg/ha-yr and in 96% of those combinations for S deposition at or below 5 kg/ha-yr (table 4 below). This summary contrasts with, and indicates appreciably greater acid buffering capacity than, the estimates for S deposition at or below 18 kg/ha-yr (table 4 below). Further, 70% of waterbody sites in all 18 eastern ecoregions are estimated to achieve an ANC at or above 50 μeq/L with ecoregion median S deposition at or below 9 kg/ha-yr. Although fewer ecoregion-time period combinations are associated with still lower S deposition estimates, contributing to increased uncertainty, we also note that for the lowest bin that is composed of at least half of the full eastern ecoregion dataset (51 ecoregion-time periods with S deposition estimates at or below 5 kg/ha-yr), 90% of waterbodies per ecoregion were estimated to achieve an ANC at or above 20 μeq/L in 96% of the combinations and at or above 50 μeq/L in 82% of the combinations (table 4 below).

In total, the ecoregion-time periods presentation indicates the likelihood of appreciably more waterbodies achieving the acid buffering capacity targets among the combinations with ecoregion median deposition at or below 9 kg/ha-yr (and for the bins for lower values) in eastern ecoregions compared to the estimates of waterbodies achieving acid buffering targets based on the full dataset that includes deposition estimates up to 18 kg/ha-yr. More specifically, this reflects an appreciably greater percentage of waterbodies in more ecoregions achieving ANC at or above 20 μeq/L, at or above 30 μeq/L, and at or above 50 μeq/L (table 4 below), with ecoregion median deposition levels at or below 9 kg/ha-yr. Additionally, these percentages increase across the bins for the lower deposition estimates, although they are also based on smaller proportions of the supporting dataset (*i.e.,* fewer ecoregion-time period combinations in each subsequently lower deposition bin).

TABLE 4—SUMMARY OF THE EASTERN ECOREGION AND TIME PERIOD COMBINATIONS ACHIEVING DIFFERENT ANC TARGETS WITH ESTIMATED S DEPOSITION AT OR BELOW DIFFERENT VALUES

S deposition (kg/ha-yr) *	% of combinations included	% of Eastern ecoregion-time period combinations ** with at least 90%, 80% or 70% waterbodies per ecoregion achieving ANC target								
		≥90% of waterbodies			≥80% of waterbodies			≥70% of waterbodies		
		20	30	50	20	30	50	20	30	50
ANC (μeq/L) at/below:										
≤18	100	73	67	60	88	87	81	92	90	89
≤13	90	80	73	65	95	94	88	98	96	96
≤11	84	83	76	68	97	96	91	99	99	99
≤9	77	87	81	72	100	99	93	100	100	100
≤7	70	92	87	78	100	100	95	100	100	100
≤6	66	93	88	78	100	100	97	100	100	100
≤5	57	96	92	82	100	100	96	100	100	100

* These values are ecoregion median estimates across all waterbody sites in an ecoregion with a CL estimate.
** These percentages are from the more extensive presentation of results in PA, Table 5–5.

The PA observes that estimates from the temporal trend perspective similarly indicate appreciable percentages of waterbodies per ecoregion being estimated to achieve the acid buffering capacity targets with ecoregion median deposition below a range of approximately 8 to 5 kg/ha-yr. For example, during the latter half of the 20-year period analyzed (*i.e.,* by the 2010–2012 period), by which time all 25 ecoregions are estimated to have more than 70% of waterbodies able to achieve an ANC at or above 50 μeq/L (and at least 85% able to achieve an ANC at or above 20 μeq/L), median deposition in 95% of the ecoregions was below 8 kg S/ha-yr, ranging from 1.3 to 7.3 kg S/ha-yr (PA, Table 7–2 and Figure 7–1). As shown in table 5 below, with each reduction in S deposition in each subsequent time period, more waterbodies in each of the eastern ecoregions are estimated to be able to achieve the ANC targets. Nearly 90% of the 18 eastern ecoregions are estimated to have at least 90% of their waterbodies achieving an ANC of 20 μeq/L in the 2010–12 period and achieving an ANC of 50 μeq/L in the 2014–16 period. When the 7 western ecoregions are included in a summary based on ANC targets of 20 μeq/L for the West and 50 μeq/L for the East,[68] over 70% of the full set of ecoregions are estimated to have at least 90% of their waterbodies achieving the ANC targets by the 2010–12 period (table 5). By the 2014–2016 and 2018–2020 periods, 24 of the 25 ecoregions were estimated to have more than 90% of waterbodies able to achieve an ANC at/above 50 μeq/L, and median S deposition in all 25 ecoregions was below 5 kg/ha-yr (table 5).

TABLE 5—ECOREGIONS ESTIMATED TO HAVE DIFFERENT PERCENTAGES OF WATERBODIES ACHIEVING DIFFERENT ANC TARGETS FOR THE FIVE DEPOSITION PERIODS ANALYZED

Time period	% (n) of ecoregions with specified percentage of waterbodies per ecoregion achieving specified ANC											
	ANC: 20 μeq/L					30 μeq/L			50 μeq/L			
	Ecoregion median S deposition (kg/ha-yr)		Percent of waterbodies per ecoregion			Percent of waterbodies per ecoregion			Percent of waterbodies per ecoregion			
	Min	Max	90%	80%	70%	90%	80%	70%	90%	80%	70%	
	East		Of 18 Eastern Ecoregions									
2001–03	4.0	17.3	39% (7)	67% (12)	72% (13)	28% (5)	61% (11)	72% (13)	22% (4)	50% (9)	72% (13)	
2006–08	3.1	14.4	44% (8)	72% (13)	89% (16)	33% (6)	72% (13)	78% (14)	33% (6)	67% (12)	72% (13)	

[68] This combination of targets recognizes the naturally and typically low ANC levels observed in western waterbodies while also including a higher target for the East, as described in section 5.1.2.2 of the PA.

TABLE 5—ECOREGIONS ESTIMATED TO HAVE DIFFERENT PERCENTAGES OF WATERBODIES ACHIEVING DIFFERENT ANC TARGETS FOR THE FIVE DEPOSITION PERIODS ANALYZED—Continued

Time period	% (n) of ecoregions with specified percentage of waterbodies per ecoregion achieving specified ANC										
	ANC: 20 μeq/L					30 μeq/L			50 μeq/L		
	Ecoregion median S deposition (kg/ha-yr)		Percent of waterbodies per ecoregion			Percent of waterbodies per ecoregion			Percent of waterbodies per ecoregion		
	Min	Max	90%	80%	70%	90%	80%	70%	90%	80%	70%
2010–12	2.3	7.3	89% (16)	100% (18)	100% (18)	83% (15)	100% (18)	100% (18)	61% (11)	89% (16)	100% (18)
2014–16	1.9	4.6	94% (17)	100% (18)	100% (18)	94% (17)	100% (18)	100% (18)	89% (16)	100% (18)	100% (18)
2018–20	1.3	3.9	100% (18)	100% (18)	100% (18)	94% (17)	100% (18)	100% (18)	94% (17)	100% (18)	100% (18)
	All		Of 25 Ecoregions (18 East, 7 West)								
2001–03	1.2	17.3	56% (14)	76% (19)	80% (20)	48% (12)	72% (18)	80% (20)	44% (11)	64% (16)	80% (20)
2006–08	1.2	14.4	60% (15)	80% (20)	92% (23)	52% (13)	80% (20)	84% (21)	52% (13)	76% (19)	80% (20)
2010–12	1.0	7.3	92% (23)	100% (25)	100% (25)	88% (22)	100% (25)	100% (25)	72% (18)	92% (23)	100% (25)
2014–16	1.1	4.6	96% (24)	100% (25)	100% (25)	96% (24)	100% (25)	100% (25)	92% (23)	100% (25)	100% (25)
2018–20	0.62	3.9	100% (25)	100% (25)	100% (25)	96% (24)	100% (25)	100% (25)	96% (24)	100% (25)	100% (25)

Note: Estimates for ANC of 50 μeq/L (East) and 20 μeq/L (West) are identical to those for 50 in all 25 ecoregions.

The temporal trends in percentage of waterbodies estimated to achieve the target ANC levels for each of the 25 individual ecoregions document a large difference between the time periods prior to 2010 and subsequent time periods (Figure 1 above; PA, Figure 7–1). For the S deposition estimated for the 2010–2012 time period, more than 70% of waterbodies are estimated to be able to achieve an ANC of 50 μeq/L in all 25 ecoregions (Figure 1, left panel), and 85% to 100% of waterbodies in all ecoregions are estimated to be able to achieve an ANC of 20 μeq/L (Figure 1, right panel).

Given the dependency of the ANC estimates on S deposition estimates, this distinction between the period prior to 2010 and the subsequent decade is also seen in the ecoregion deposition estimates for the 25 REA ecoregions (Figure 2; PA, Figure 7–2). The distribution of deposition estimates at waterbody sites assessed in each ecoregion, and particularly the pattern for the higher percentile sites in each ecoregion, illustrates the deposition estimates that are driving the REA estimates. For example, among the 25 East and West ecoregions during the two periods prior to 2010, the medians of the ecoregion 90th percentile deposition estimates ranged from approximately 14 to 17 kg/ha-yr, with maximum values above 20 kg/ha-yr (Figure 2). This contrasts with the deposition estimates during the 2010–2020 period when, among all 25 ecoregions, the medians of the ecoregion 90th percentile deposition estimates ranged from approximately 2 to 5 kg/ha-yr, with all ecoregion 90th percentile estimates below 8 kg/ha-yr (Figure 2). The contrast is less sharp for the ecoregion medians, as the median is a statistic less influenced by changes in the magnitude of values at the upper end of the distribution (Figure 2).

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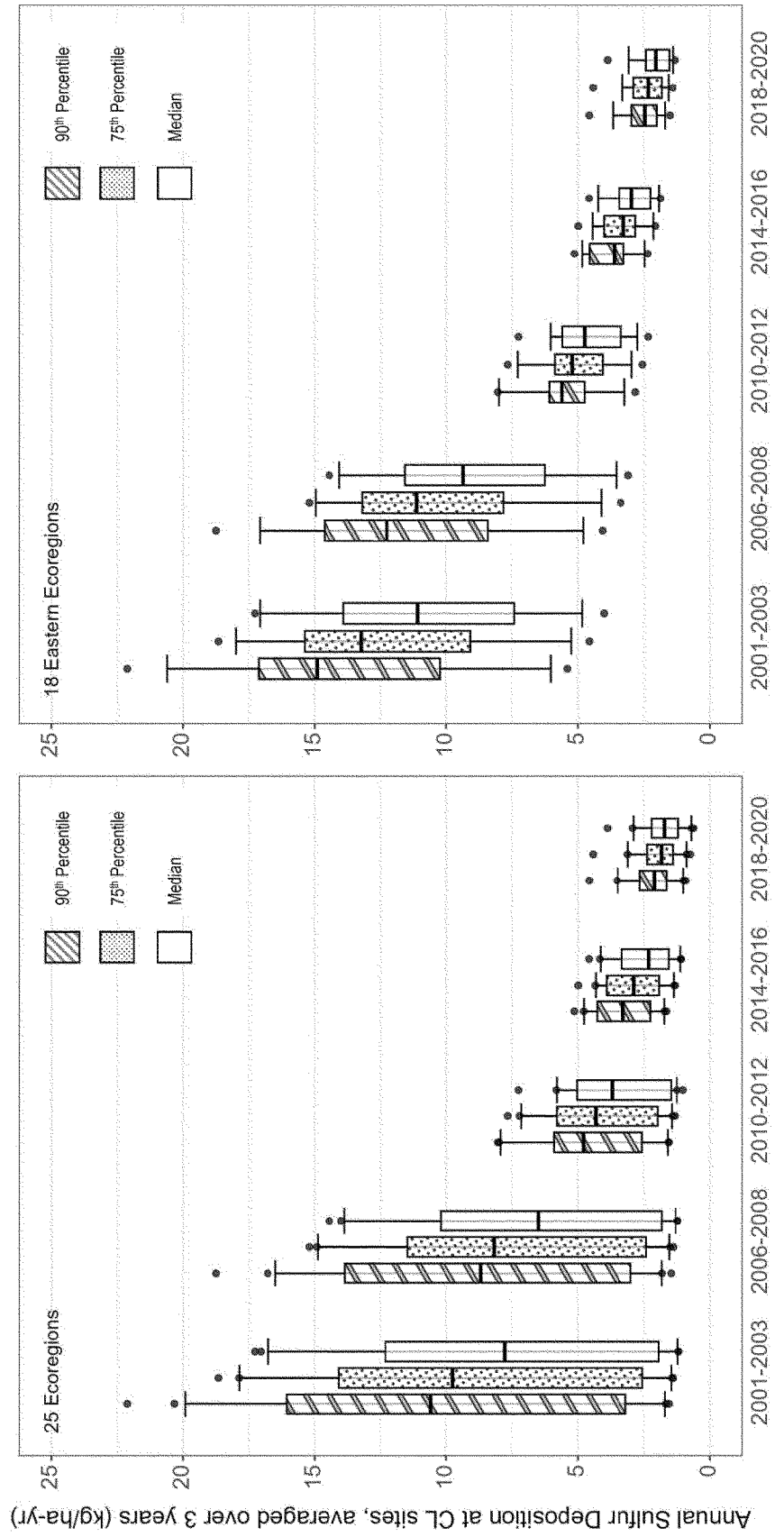


Figure 2. Ecoregion 90th, 75th and 50th Percentile S Deposition Estimates at REA Waterbody Sites Summarized for all 25 Ecoregions (left) and the 18 Eastern Ecoregions (right).

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Thus, in considering identification of S deposition levels that may be associated with a desired level of ecosystem protection for an SO_X

standard, the PA took note of the increased percentages of waterbodies estimated to achieve more protective ANC levels across the five time periods. The pattern of estimated improving water quality over the 20-year study period is paralleled by the pattern of declining deposition, which is more obvious in the upper percentiles (than the median) of the distribution of values per ecoregion (Figure 2). This pattern indicates appreciable difference between the first and second decades of the period in terms of S deposition (at upper percentiles as well as at the median of sites within the 25 ecoregions) and associated aquatic acidification risk. The ecoregion with the highest S deposition in the latter decade (2010–2020) had 90th percentile estimates ranging from approximately 8 kg/ha-yr to just below 5 kg/ha-yr (and median estimates with a very similar range) across this decade (Figure 2). As noted immediately above, the risk estimates associated with the deposition estimates of this decade indicate generally high percentages of waterbodies per ecoregion as able to achieve or exceed the three ANC targets. Similarly, the ecoregion-time period binning summary also indicates generally high percentages of waterbodies achieving ANC targets for ecoregion median S deposition at or below about 8 or 9 kg/ha-yr (table 4). Lastly, the case study CL estimates also indicate appreciable portions of the case study areas that might be expected to attain the three ANC targets with deposition below 9 kg/ha-yr. Thus, in light of these observations, the PA describes S deposition, on an areawide basis, that falls below approximately 10–5 kg/ha-yr, or 8–5 kg/ha-yr (differing slightly depending on the supporting analysis), as being associated with the potential to achieve acid buffering capacity levels of interest in an appreciable portion of sensitive areas.

In considering what the quantitative information regarding S deposition and terrestrial acidification indicates regarding deposition levels of relatively greater and lesser concern for potential acidification-related effects (and the associated uncertainties), the PA considers soil chemistry modeling analyses (both those described in published studies and an analysis performed in the 2009 REA), studies involving experimental additions of S compounds to defined forestry plots, and observational studies of potential relationships between terrestrial biota assessments and metrics for S deposition (PA, section 5.3). With regard to soil chemistry modeling analyses performed in the last review, the PA notes that the resulting estimates of acidic deposition CLs for three values of the soil acidification indicator, BC:Al ratio, indicated a range generally well above the CL estimates associated with achieving various ANC targets in the aquatic acidification analyses discussed above. The soil acidification CLs were also above all of the ecoregion estimates (across the five time periods from 2001 through 2020) considered in the aquatic acidification analyses (PA, Table 5–7). Thus, the PA concluded that these soil acidification modeling findings indicate that a focus on aquatic acidification might reasonably be expected to also provide protection from soil acidification effects on terrestrial biota. With regard to studies involving S additions to experimental forested areas, the PA notes that although the number of tree species that have been included in such experiments is somewhat limited, the more widely recognized sensitive species (based on field observations) have been included in such studies. Across these studies, the PA observes that effects on the trees analyzed have not been reported with S additions below 20 kg/ha-yr (which is in addition to the atmospheric deposition occurring during the experiment).

The PA also considers the recently available quantitative information regarding S deposition and terrestrial acidification drawn from two observational studies that report associations of tree growth and/or survival metrics with various air quality or S deposition metrics, providing support to conclusions regarding the role of acidic S deposition on tree health in the U.S., most particularly in regions of the eastern U.S. (PA, section 5.3.2.3 and Appendix 5B, section 5B.3.2). The metrics used in the two largest studies include site-specific estimates of average SO_4^{2-} deposition and of average total S deposition over the interval between tree measurements, generally on the order of 10 years (Dietze and Moorcroft, 2011; Horn et al., 2018). In the study that used SO_4^{2-} as the indicator of acidic S deposition, and for which the study area was the eastern half of the contiguous U.S., site-specific average SO_4^{2-} deposition (1994–2005) ranged from a minimum of 4 kg/ha-yr to a maximum of 30 kg/ha-yr (Dietze and Moorcroft, 2011). Review of the study area for this study and a map indicating geographic patterns of deposition during the period of the deposition data indicate the lowest deposition areas to be west of the Mississippi River, northern New England (*e.g.,* Maine) and southern Georgia and Florida (in which S deposition in the 2000–2002 period is estimated to fall below 8 kg/ha-yr), and the highest deposition areas to be a large area extending from New York through the Ohio River valley (PA, Appendix 5B, Figures 5B–1 and 5B–11). In the second study, deposition at the sites with species for which growth or survival was negatively associated with S deposition ranged from a minimum below 5 kg/ha-yr to a site maximum above 40 kg/ha-yr, with medians for these species generally ranging from around 5 to 12 kg S/ha-yr (Appendix 5B, section 5B.3.2.3; Horn et al., 2018).

In considering these study observations, the PA notes the history of appreciable acidic deposition in the eastern U.S., with its associated impacts on soil chemistry, that has the potential to be exerting a legacy influence on tree growth and survival more recently (PA, section 5.3.2 and Appendix 5B). Further, the PA notes that at a national-scale, the geographic deposition patterns (*e.g.,* locations of relatively greater versus relatively lesser deposition) more recently appear to be somewhat similar to those of several decades ago (*e.g.,* PA, sections 2.5.4 and 6.2.1). This similarity in patterns is recognized to have the potential to influence findings of observational studies that assess associations between variation in tree growth and survival with variation in levels of a metric for recent deposition at the tree locations, and to contribute uncertainty with regard to interpretation of these studies as to a specific magnitude of deposition that might be expected to elicit specific tree responses, such as those for which associations have been found. The PA notes that, as recognized in the study by Dietze and Moorcroft (2011), which grouped species into plant functional groups, acidification impacts on tree mortality result from cumulative long-term deposition, and patterns reported by their study should be interpreted with the knowledge that acidification impacts on tree mortality result from cumulative long-term deposition (PA, section 5.3.1 and Appendix 5B).

(3) Relating Air Quality Metrics to S Deposition

In considering what the available information and air quality analyses indicate regarding relationships between air quality metrics and S deposition, the PA evaluated trends over the past two decades as well as a series of analyses of relationships between S deposition and ambient air concentrations of SO_2 (in terms of 3-year averages of the existing SO_2 standard and as an annual average), and between S deposition and ambient air

concentrations of other S compounds (*e.g.,* SO_4^{2-} or summed SO_4^{2-} and SO_2) at 27 Class I area sites, as summarized in section II.B above.[69] With regard to indicators other than SO_2, lower correlations were observed for collocated total S deposition estimates with indicators of atmospheric S-containing pollutants (particulate SO_4^{2-} and the sum of S in SO_2 and particulate SO_4^{2-} in 27 Class I areas than between S deposition and annual average SO_2 concentrations (averaged over three years) at SLAMS monitors (PA, Figures 6–27 and 6–31 and Table 6–4). Thus, while the data at the Class I area sites (collocated CASTNET and IMPROVE network sites) provide information for S compounds other than SO_2, the analyses based on data from SLAMS are considered particularly relevant given that those sites are primarily in areas of higher SO_2 concentrations near emissions sources and collect FRM/FEM measurements for evaluating ambient air concentrations relative to the existing NAAQS. Information from these monitoring sites is useful in understanding how changes in SO_2 emissions, reflected in ambient air concentrations, may relate to changes in deposition and, correspondingly, what secondary standard options might best relate to ambient air concentrations such that deposition in areas of interest is maintained at or below range of levels identified above (PA, section 7.2.2.3).

Together the air quality and deposition data and analyses in the PA indicate a significant association of S deposition with SO_2 concentrations, with statistically significant correlation coefficients ranging from approximately 0.50 up to 0.70 from the trajectory-based and SLAMS analyses for the five 3-year time periods (during 2001–2020) across all ecoregions. Higher correlations were observed for dry S deposition and at sites in the eastern U.S. (PA, section 7.2.2.3). As summarized in section II.B above, S deposition is generally higher in the east and dry S deposition is generally higher near SO_2 emissions sources. In considering the two types of analyses, relating concentrations to deposition either nearby or in downwind areas, the PA notes that a strength of the analyses for concentrations and deposition estimates at SLAMS locations is the capturing of near-source deposition, while a strength of the trajectory-based analyses is accounting for the role of transport and transformation in contributing to downwind deposition.

While recognizing the significant correlations between SO_2 concentrations and S deposition, the PA additionally took note of the variability in, and uncertainty associated with relationships between SO_2 concentrations at SLAMS monitors and nearby and/or downwind S deposition. The variability relates to the complexity of the atmospheric chemistry, pollutant transport, and deposition processes (PA, sections 2.1.1 and 2.5). The uncertainty in these relationships relates to a number of factors, including uncertainty in our estimates of S deposition (PA, section 2.5.2) and spatial distribution of monitor sites, including the representation of significant SO_2 emissions sources, as well as elements of the trajectory-based analysis, *e.g.,* inclusion criteria for identifying monitoring sites of influence (PA, section 6.3 and Table 6–13). The PA concluded that it is unclear how much and in what way each of these various uncertainties in the data and analyses, and the inherent variability of the physical and chemical processes involved, might impact the conclusions concerning ambient air SO_2 concentrations related to S deposition estimates at different scales (PA, section 7.2.2.3). In light of such uncertainty and variability, the REA aquatic acidification analyses and discussion of S deposition levels focused on statistics for deposition estimates representing large areas (*e.g.,* at the ecoregion median and 75th or 90th percentile, and case study area average or 70th and 90th percentile CLs). While uncertainty may be greater for relating concentrations to higher points on the distribution of deposition in an ecoregion, the PA recognized that it is the higher deposition estimates, if focused on individual waterbodies, that will contribute most to aquatic acidification risk, and additionally observed that the distribution of S deposition estimates within ecoregions has collapsed in the more recent years of the 20-year analysis period, with 90th percentile estimates falling much close to the medians than in the first decade of the period (Figure 2 above; PA, Figure 7–2).

In light of the declining trend in S deposition and the corresponding REA estimates of increasing ANC in sensitive ecoregions (as discussed above), the PA considered the annual average SO_2 concentration at SLAMS across five time periods from 2000–2020. In so doing, the PA focused on the most recent time periods analyzed (*i.e.,* since 2010) when the REA indicated appreciably improved levels of acid buffering capability in the waterbodies of the 25 analyzed ecoregions (when ANC targets were met or exceeded in a high percentage of water bodies across a high percentage of ecoregions). This information indicates that during the most recent time periods (in which ecoregion median S deposition estimates for the 25 REA ecoregions were below 10 kg/ha-yr), the highest 3-year average annual SO_2 concentrations were generally somewhat above 10 ppb (with some exceptions during the 2019–2021 period), and 95% of the concentrations in each of the three most recent periods are just at or below 5 ppb (PA, Figure 7–5, left panel). The distributions of annual average SO_2 concentrations exhibit a similar pattern of concentrations to that for the 3-year averages, suggesting there to be little year-to-year variability in this metric (PA, Figure 7–5).

In identifying levels for consideration for a potential annual average SO_2 standard, the PA also gives attention to the SO_2 concentrations at monitoring sites of influence identified in the trajectory-based analyses across different ranges of downwind ecoregion S deposition estimates. In the dataset for all 84 ecoregions in the contiguous U.S., the maximum annual average SO_2 concentrations, averaged over three years, at sites of influence to downwind ecoregions with median S deposition ranging below 9 kg S/ha-yr to 6 kg/ha-yr,[70] were all below 15 ppb, and 75% of the monitor sites of influence concentrations were at or below 10 ppb (PA, Figure 7–3).[71] In the subset of data for the 25 REA ecoregions with their upwind monitors, for the bin that includes deposition below 9 down to 6 kg/ha-yr, the concentrations for the metric based on maximum concentration at upwind sites of influence (EAQM-max) range as high as 15 ppb, with more than half below 10 ppb (PA, Figure 7–4, left panel). The EAQM-max concentrations associated with ecoregion median deposition in the

[69] The air quality metrics include one based on the current secondary SO_2 NAAQS, which is the second highest 3-hour daily maximum in a year, as well as an annual average SO_2 air quality metric (averaged over three years). In light of the many factors contributing variability to S deposition, the analyses focus on a 3-year average of all of the air quality and deposition metrics and include multiple years of data, generally on the order of 20 years and covering a period of declining concentrations and deposition. Of the two air quality metrics analyzed, the PA focused primarily on the annual average of SO_2 concentrations, averaged over 3 years, given the focus on control of long-term S deposition and the greater stability of the metric (PA, section 7.2.2.3).

[70] The bin for ''<9 − 6 kg/ha-yr'' is discussed here as it is the bin closest to the deposition target range of 10 or 8 to 5 kg/ha-yr identified above.

[71] Figure 7–3 of the PA presents the pairs of median deposition estimates and associated upwind sites of influence EAQM-max SO_2 concentrations from the trajectory-based analysis in section 6.2.4 of the PA (specifically, the combined datasets presented in PA, Figures 6–40 and 6–41).

lowest bins (S deposition below 6 kg/ha-yr) were all below 10 ppb. This pattern suggests that when the highest EAQM-max concentration is somewhat below 15 ppb and down to 10 ppb, the ecoregion median deposition is below 9 kg/ha-yr and the 90th percentile deposition is below 13 kg/ha-yr. When the highest EAQM-max concentration is at approximately 11 ppb, or 10 ppb, both the median and 90th percentile deposition are below 9 kg/ha-yr (PA, Figure 7–4).

The PA additionally discusses limitations associated with relating individual monitor SO_2 concentrations to S deposition in the context of the two metrics employed in the trajectory-based analyses. Between these metrics, somewhat stronger correlations were found for the annual average SO_2 weighted EAQM (which provides for proportional weighting of air concentrations from locations projected to contribute more heavily to a particular ecoregion), compared to the EAQM-max, particularly for the first two to three time periods of the 20-year period. This difference is related to the extent to which monitor concentrations can be indicative of atmospheric loading. The weighted EAQM is intended to more closely represent the atmospheric loading for the locations (and associated sources) of the contributing (sites of influence) monitors than a single contributing monitor can. However, the weighted metric is not directly translatable to a standard level (which is an upper limit on concentrations in individual locations). Conversely, unweighted concentrations (even from the maximum contributing monitor) are limited in the extent to which they can reflect atmospheric loading due to a number of factors, including monitor and source distribution and magnitude of emissions. The lower correlations observed between deposition and the maximum EAQM in areas of lower concentrations are an indication of this complexity. Across a broad enough range in deposition (*e.g.,* as occurring in the earlier time periods and in the East), a rough correlation is observed, which breaks down across smaller ranges in deposition, as evidenced by the much lower correlations for the more recent period with its much lower magnitude of deposition and much smaller range in deposition (PA, section 7.2.2.3).

In its consideration of the trajectory-based analyses to identify a range of annual average SO_2 EAQM-max concentrations that may be associated with an ecoregion median S deposition range from 5 to 10 kg S/ha-yr, the PA recognizes several important considerations. First, monitor concentrations of SO_2 can vary substantially across the U.S., reflecting the distribution of sources, and other factors such as meteorology. This complicates consideration of how the EAQM-max, the maximum contributing monitor identified in the trajectory-based analysis (summarized in section II.B above and described more fully in section 6.2.4 of the PA) relates to S deposition levels in downwind ecosystems. Another consideration is the substantial scatter in the relationship between S deposition estimates and measured SO_2 concentrations with ecoregion median S deposition values below 5 kg/ha-yr. This scatter in the relationship between measured SO_2 concentration and S deposition estimates at these lower deposition levels contributes increased uncertainty to conclusions regarding potential secondary standard SO_2 metric levels intended to relate to ecoregion median deposition levels at or below 5 kg/ha-yr (PA, section 7.2.2.3).

With regard to consideration of relationships between S deposition and $PM_{2.5}$, poor correlations were observed for total S deposition estimates with $PM_{2.5}$ at the 27 Class I area sites (r=0.33, PA, Figure 6–31), with not much stronger correlations for ecoregion S deposition estimates with $PM_{2.5}$ at upwind sites of influence from the trajectory-based analysis (r=0.22 and 0.48, PA, Table 6–12). While the correlations in the trajectory-based analyses for deposition in eastern ecoregions were much higher (r=0.83 and 0.90), the coefficients were negative for deposition in western ecoregions. The PA concluded that the preponderance of western sites in the Class I area dataset (20 of the 27 sites) may be an influence on the low correlation observed for that dataset. Given that the analyses involving total S deposition and ambient air SO_4^{2-} concentrations are at remote locations (Class I areas), distant from sources of SO_2 emissions, and that that relationship is not stronger than that for SO_2 at the SLAMS, which are near sources monitoring SO_2 (the source for atmospheric SO_4^{2-}), the PA found that the analyses did not indicate an advantage for an indicator based on SO_4^{2-} measurements (or SO_4^{2-} and SO_2 combined), such as is currently collected at CASTNET sites, or $PM_{2.5}$ mass over options for a potential annual average standard metric focused on SO_2 concentrations (based on FRM/FEMs).[72]

[72] It is also of note that use of SO_4^{2-} measurements, alone or in combination with SO_2 concentrations, as an indicator of a new standard would entail development of sample collection and analysis FRM/FEMs and of a surveillance network.

d. Nitrogen Deposition and N Oxides and PM

The subsections below summarize the evidence and exposure/risk-based considerations of the PA pertaining to N deposition and concentrations of N oxides and PM in ambient air. These considerations draw on the available welfare effects evidence described in the current ISA (as well as prior ISAs and AQCDs), and discussed in Chapters 4, 5 and 6 of the PA. The focus of these considerations is primarily on N deposition and effects other than aquatic acidification (PA, sections 4.3, 5.2 and 5.3). As recognized in section II.D above, the PA finds S deposition to be the dominant influence on aquatic acidification risk in the 20-year period analyzed (2001–2020), based on the finding that the inclusion of acidic N deposition to the aquatic acidification risk analyses did not appreciably change patterns and percentages of waterbodies estimated to exceed CLs for the three ANC targets (PA, section 5.1.2.4).

In considering potential public welfare protection from N deposition-related effects (in light of the evidence summarized in sections II.C.1 and II.C.3 above), the PA recognizes that the effects of N deposition in both aquatic and terrestrial ecosystems have potential public welfare implications (PA, section 7.2.3.2). For example, in the case of eutrophication in large estuaries and coastal waters of the eastern U.S., the public welfare significance of effects related to decades of N loading is illustrated by the broad State, local and national government engagement in activities aimed at assessing and reducing the loading (PA, section 5.2.3). This significance relates both to the severity of the effects and the wide-ranging public uses dependent on these waters. These waterbodies are important sources of fish and shellfish production, capable of supporting large stocks of resident commercial species and serving as breeding grounds and interim habitat for several migratory species, and also provide an important and substantial variety of cultural ecosystem services, including water-based recreational and aesthetic services, as well as non-use benefits to the public. The impacts of eutrophication relate to the consequence of the rapid and appreciable algal growth it fuels. Decomposition of the plant biomass from the subsequent algal die-off contributes to reduced waterbody oxygen which, among other things, in turn contributes to fish

mortality, and changes in aquatic habitat related to changes in resident plant and animal species (PA, section 4.3; ISA, Appendix 7).

The relative contribution of atmospheric deposition to total N loading, however, varies widely among estuaries and has declined in more recent years, contributing a complexity to considerations in this review. While such complications may not affect smaller, more isolated fresh waterbodies for which N loading is primarily from atmospheric deposition, the evidence with regard to public welfare significance of any small deposition-related effects in these systems is less clear and well established. For example, the public welfare implications of relatively subtle effects of N enrichment in aquatic systems, such as shifts in phytoplankton species communities in remote alpine lakes, are not clear. Additionally, the public welfare implications of HNO_3 effects on lichens (which might be considered to be ''direct'' effects or the result of deposition onto plant surfaces) are also not clear and might depend on the extent to which they impact whole communities, other biota, or ecosystem structure and function (PA, section 7.2.3.2).

With regard to N enrichment in terrestrial ecosystems, the associated effects may vary with regard to public welfare implications. As noted above with regard to impacts of aquatic acidification, the PA recognizes that some level of N deposition and associated effects on terrestrial ecosystems can impact the public welfare and thus might reasonably be judged adverse to the public welfare. Depending on magnitude and the associated impacts, there are situations in which N deposition and associated nutrient enrichment-related impacts might reasonably be concluded to be significant to the public welfare, such as N deposition that alters forest ecosystem community structures in ways that appreciably affect use and enjoyment of those areas by the public (PA, section 7.2.3.2).

A complication to consideration of public welfare implications that is specific to N deposition in terrestrial systems is its potential to increase growth and yield of agricultural and forest crops (including timber), which may be judged and valued differently than changes in growth of some species in natural ecosystems. Nitrogen enrichment in natural ecosystems can, by increasing growth of N limited plant species, change competitive advantages of species in a community, with associated impacts on the composition of the ecosystem's plant community. The public welfare implications of such effects may vary depending on their severity, prevalence or magnitude, such as with only those rising to a particular severity (*e.g.,* with associated significant impact on key ecosystem functions or other services), magnitude or prevalence considered of public welfare significance (PA, section 7.2.3.2).

(1) Quantitative Information for Ecosystem Risks Associated With N Deposition

The PA considers the available information regarding air quality and atmospheric deposition and risk or likelihood of occurrence of ecosystem effects under differing conditions. In so doing, the PA notes the varying directionality of some of the N enrichment-related effects in terrestrial ecosystems, such that some effects can, in particular ecosystems and for particular species seem beneficial (*e.g.,* to growth or survival of those species), although in a multispecies system, effects are more complex with potential for alteration of community composition. The information is also considered with regard to the key limitations and associated uncertainties of this evidence.

Beginning with the appreciable evidence base documenting assessments of N loading to waterbodies across the U.S., the PA notes the waterbody-specific nature of such responses and the relative role played by atmospheric deposition, among other N sources. For example, the relative contribution to such loading from atmospheric deposition compared to other sources (*e.g.,* agricultural runoff and wastewater discharges) varies among waterbody types and locations, which can be a complicating factor in quantitative analyses. Additionally, characteristics of resident biota populations and other environmental factors are influential in waterbody responses to N loading, *e.g.,* temperature, organic microbial community structure, and aquatic habitat type, among others (ISA, Appendix 7). Based on identification of eutrophication as a factor in impacts on important fisheries in some estuaries across the U.S., multiple government and nongovernment organizations have engaged in research and water quality management activities over the past several decades in large and small estuaries and coastal waters across the U.S. These activities have generally involved quantitative modeling of relationships between N loading and water quality parameters such as dissolved oxygen (ISA, Appendix 7, section 7.2). This research documents both the impacts of N enrichment in these waterbodies and the relationships between effects on waterbody biota, ecosystem processes and functions, and N loading (PA, section 5.2.3). The evidence base recognizes N loading to have contributions from multiple types of sources to these large waterbodies and their associated watersheds, including surface and ground water discharges, as well as atmospheric deposition. Accordingly, loading targets or reduction targets identified for these systems have generally been identified in light of policy and management considerations related to the different source types, as discussed further in section II.E.1.d(2) below.

Focused assessments in freshwater lakes, including alpine lakes, where atmospheric deposition may be the dominant or only source of N loading, also provide evidence linking N loading with seemingly subtle changes (PA, section 5.2.2). Such seemingly subtle changes include whether P or N is the nutrient limiting phytoplankton growth (and productivity) and shifts in phytoplankton community composition, for which public welfare implications are less clear (PA, section 7.2.3.1). An additional type of aquatic ecosystem effect recognized in the available evidence for N loading, particularly to freshwaters, relates to an increase in the toxicity of the organic material released by algae that is associated with harmful algal blooms (ISA, Appendix 9, section 9.2.6.1). Information available in this review indicates that growth of some harmful algal species, including those that produce microcystin (one of the chemicals associated with harmful blooms), are favored by increased availability of N and its availability in dissolved inorganic form (ISA, Appendix 9, p. 9–28). Although this is an active research area, few if any datasets are currently available that quantitatively relate N loading to risk of harmful blooms, including those that may distinguish roles for different deposition components such as deposition of oxidized N or of particulate reduced N distinguished from that of N loading via dry deposition of reduced N.

With regard to terrestrial ecosystems and effects on trees and other plants, the PA recognizes the complexity, referenced above, that poses challenges to approaches for simulating terrestrial ecosystem responses to N deposition across areas diverse in geography, geology, native vegetation, deposition history, and site-specific aspects of other environmental characteristics. In its consideration of the different types of quantitative analysis, the PA recognizes

limitations particular to each, and associated uncertainties. Uncertainties associated with the soil acidification modeling analyses in the last review include those associated with the limited dataset of laboratory-generated data on which the BC:Al targets are based, as well as the steady-state modeling parameters, most prominently those related to base cation weathering and acid-neutralizing capacity (PA, section 5.3.4.1). Uncertainties associated with experimental addition analyses include the extent to which the studies reflect steady-state conditions, as well as a lack of information regarding historic deposition at the study locations (PA, section 5.3.4.1). Several aspects of observational or gradient studies of tree growth and survival (or of species richness for herbs, shrubs and lichens) contribute uncertainties to identification of deposition levels of potential concern for tree species effects, including unaccounted-for factors with potential influence on tree growth and survival (*e.g.,* ozone and soil characteristics), as well as the extent to which associations may reflect the influence of historical deposition patterns and associated impact. Thus, while the evidence is robust as to the ability for N loading from deposition to contribute to changes in plant growth and survival and associated alterations in terrestrial plant communities, a variety of factors, including the history of deposition and variability of response across the landscape, complicate our ability to quantitatively relate specific N deposition rates, associated with various air quality conditions, to N enrichment-related risks of harm to forests and other plant communities in areas across the U.S. (PA, section 5.3.4).

(2) General Approach for Considering Public Welfare Protection

As an initial matter, the PA notes that the effects of acidification on plant growth and survival, at the individual level, are generally directionally harmful, including reduced growth and survival. In contrast, the effects of N enrichment can, in particular ecosystems and for particular species, be beneficial or harmful (*e.g.,* to growth or survival of those species). Accordingly, there is added complexity to risk management policy decisions for this category of effects, including the lack of established risk management targets or objectives, particularly in light of historical deposition and its associated effects that have influenced the current status of terrestrial ecosystems and their biota, structure, and function.

Further, the PA recognizes the contribution to N deposition of atmospheric pollutants other than the criteria pollutants N oxides and PM, most significantly the contribution of NH_3 (PA, section 6.2.1). This contribution has increased since the last reviews of the NO_2 and PM secondary standards, as seen in Figures 6–17, 6–18 and 6–19 of the PA, reflecting increases in NH_3 emissions over that time period. These trends of increased NH_3 emissions and reduced N deposition coincide with decreasing trends in N oxides emissions and associated contributions of oxidized N to total N deposition (PA, Figures 6–3 and 6–19). The TDep estimates of different types of N being deposited at the 92 CASTNET sites indicate that since about 2015, reduced N compounds comprise a greater proportion of total N deposition than do oxidized compounds, with reduced N in recent years generally accounting for more than 50% of total N deposition (PA, Figure 6–19). Further, dry deposition of NH_3 as a percentage of total N deposition at CASTNET sites ranges up to a maximum of 65% at the highest site in 2021 (PA, Figure 6–19). The 75th percentile for these sites is greater than 30% (*i.e.,* at 25% of the CASTNET sites, more than 30% of N deposition is from dry deposition of NH_3). This is a noteworthy value given that these sites are generally in the West, with few in the areas of highest NH_3 emissions where the percentage would be expected to be higher still (PA, Figures 6–20 and 2–9).

In light of the contrasting temporal trends for emissions of oxidized and reduced N compounds, the PA observes that the influence of ambient air concentrations of N oxides and PM on N deposition appears to have declined over the past 20 years, complicating consideration of the protection from N deposition-related effects that can be provided by secondary NAAQS for these pollutants. Thus, the PA finds that NH_3, which is not a criteria pollutant, and its contribution to total N deposition, particularly in parts of the U.S. where N deposition is highest, is a complicating factor in considering policy options related to NAAQS for addressing ecological effects related to N deposition (*e.g.,* PA, Figure 6–18 and 6–13).

In considering what the currently available quantitative information regarding terrestrial ecosystem responses to N deposition indicates about levels of N deposition that may be associated with increased concern for adverse effects, the PA focuses first on the evidence for effects of N deposition on trees derived from both experimental addition studies and observational studies of potential relationships between tree growth and survival and metrics for N deposition. With regard to the information available from experimental addition tree studies, the PA recognizes study limitations and associated uncertainties, while noting that the lowest forest N addition that elicited effects was 15 kg N/ha-yr over a 14-year period occurring from 1988–2002 (PA, sections 5.3.2 and 7.2.3.2 and Appendix 5B, Table 5B–1; McNulty et al., 2005). Based on the estimates from the array of observational studies, the PA finds that N deposition with a range of 7 to 12 kg/ha-yr, on a large area basis, may be a reasonable characterization of conditions for which statistical associations have been reported for terrestrial effects, such as reduced tree growth and survival and species richness of herbs and shrubs (PA, sections 5.3.4 and 7.2.3.2).

With regard to observational or gradient studies of N deposition and tree growth and survival (or mortality), the PA gave particular attention to three recently available studies that used the U.S. Forest Service dataset of standardized measurements at sites across the U.S. (Dietze and Moorcroft, 2011; Thomas et al., 2010; Horn et al., 2018). These studies cover overlapping areas of the U.S. (PA, Appendix 5B, Figure 5B–1) and report associations of tree growth and/or survival metrics with various N deposition metrics for three different time periods. These studies provide support to conclusions regarding a role for N deposition in affecting tree health in the U.S., most particularly in regions of the eastern U.S., where confidence in the study associations is greatest (PA, section 5.3.2.3 and Appendix 5B, section 5B.3.2). In considering information from these studies, the PA notes the history of N deposition in the eastern U.S. and the similarity between geographic patterns of historical deposition and more recent deposition patterns in the U.S., which may influence the findings of observational studies, contributing an uncertainty to estimates of a specific magnitude of deposition rate that might be expected to elicit specific tree responses, such as increased or decreased growth or survival (PA, sections 5.3.2 and 7.2.3.2 and Appendix 5B). The largest study, which included 71 species with ranges across the U.S., reported associations of tree survival and growth with N deposition that varied from positive to negative across the range of deposition at the measurement plots for some species, and also varied among species (PA,

Appendix 5B, section 5B.3.2.3; Horn et al., 2018). The median deposition values across the sample sites for species with significant positive or negative associations generally ranged from 7 to 12 kg N/ha-yr (PA, section 5.3.2 and Appendix B, section 5B.3.2.3). Among the species for which the association varied from negative to positive across deposition levels, this is the range for those species for which the association was negative at the median deposition value (PA, section 5.3.4).[73]

With regard to studies of herb and shrub community response, the PA notes a number of recently available studies report on addition experiments (PA, section 5.3.3.1 and Appendix 5B, section 5B.3.1). The lowest rate of N addition, in an addition study, for which community effects have been reported include 10 kg N/ha-yr. With an addition of 10 kg N/ha-yr over a 10-year period, grassland species numbers declined; in a subset of plots for which additions then ceased, relative species numbers increased, converging with controls after 13 years (PA, Appendix 5B, Table 5B–7; Clark and Tilman, 2008). Recent gradient studies of coastal sage scrub in southern California have indicated N deposition above 10 or 11 kg/ha-year to be associated with increased risk of conversion to non-native grasslands or reduced species richness (PA, Appendix 5B; section 5B.3.2; Cox et al., 2014; Fenn et al., 2010). A larger observational study of herb and shrub species richness in open- and closed-canopy communities using a database of site assessments conducted over a 23-year period and average N deposition estimates for a 26-year period, reported significant influence of soil pH on the relationship between species richness and N deposition metric. A negative association was observed for acidic (pH 4.5) forested sites with N deposition estimates above 11.6 kg N/ha-yr and for low pH open canopy sites (woods, shrubs and grasses) with N deposition estimates above 6.5 kg N/ha-yr (PA, section 5.3.3.1). Lastly, the PA notes the observational studies that have analyzed variation in lichen community composition in relation to indicators of N deposition (PA, section 5.3.3.2 and Appendix 5B, section 5B.4.2). In addition to limitations with regard to interpretation, uncertainties associated with these studies include alternate methods for utilizing N deposition estimates as well as the potential influence of unaccounted-for environmental factors, *e.g.,* ozone, SO_2, and historical air quality and associated deposition (PA, section 5.3.3.2).

With regard to the evidence for effects of N deposition in aquatic ecosystems, we recognize several different types of information and evidence. This information includes the observational studies utilizing statistical modeling to estimate critical loads, such as those related to subtle shifts in the composition of phytoplankton species communities in western lakes. This also includes the four to five decades of research on the impacts and causes of eutrophication in large rivers and estuaries. In considering this diverse evidence base, we take note of the robust evidence base on N loading and eutrophication, with its potentially significant impacts on submerged aquatic vegetation and fish species, particularly in large river systems, estuaries, and coastal systems.

As noted above, the public attention, including government expenditures, that has been given to N loading and eutrophication in several estuarine and coastal systems are indicative of the recognized public welfare implications of related impacts. In large aquatic systems across the U.S., the relationship between N loading and algal blooms, and associated water quality impacts (both short- and longer-term), has led to numerous water quality modeling projects to inform water quality management decision-making in multiple estuaries, including Chesapeake Bay, Narraganset Bay, Tampa Bay, Neuse River Estuary and Waquoit Bay (ISA, Appendix 7, section 7.2). These projects often use indicators of nutrient enrichment, such as chlorophyll a, dissolved oxygen, and abundance of submerged aquatic vegetation, among others (ISA, section IS.7.3 and Appendix 10, section 10.6). For these estuaries, the available information regarding atmospheric deposition and the establishment of associated target loads varies across the various estuaries (ISA, Appendix 7, Table 7–9). Further, in many cases atmospheric loading has decreased since the initial modeling analyses.

As summarized in section II.C.3 above, analyses in multiple East Coast estuaries—including Chesapeake Bay, Tampa Bay, Neuse River Estuary and Waquoit Bay—have considered atmospheric deposition as a source of N loading (ISA, Appendix 7, section 7.2.1). Total estuary loading or loading reductions were established in TMDLs developed under the Clean Water Act for these estuaries. Levels identified for allocation of atmospheric N loading in the first three of these estuaries were 6.1, 11.8 and 6.9 kg/ha-yr, respectively, and atmospheric loading estimated to be occurring in the fourth was below 5 kg/ha-yr (PA, section 7.3). This information, combined with the information from terrestrial studies summarized above, led to the PA identifying 7–12 kg/ha-yr as an appropriate N deposition range on which to focus in considering policy options (PA, section 7.2.3.2).

(3) Relating Air Quality Metrics to N Deposition Associated With N Oxides and PM

In exploring how well various air quality metrics relate to N deposition, the analyses in Chapter 6 of the PA examine the relationships between air concentrations, in terms of various air quality metrics (including design values for the current standards), and N deposition in areas near or downwind from the ambient air monitoring sites. The PA finds the analyses utilizing data from monitors using FRM/FEM to collect ambient air concentration data for evaluation with the NAAQS (*e.g.,* to identify violations) to be particularly relevant given that the current standards are judged using design values derived from FRM/FEM measurements at existing SLAMS (PA, section 7.2.3.3). Given their role in monitoring for compliance with the NAAQS, most or many of these monitors are located in areas of relatively higher pollutant concentrations, such as near large sources of NO_2 or PM. Accordingly, the PA notes that information from these monitoring sites can help inform how changes in NO_2 and/or PM emissions, reflected in ambient air concentrations, relate to changes in deposition and, correspondingly, what secondary standard options might best regulate ambient air concentrations such that deposition in sensitive ecosystems of interest is maintained at or below levels of potential concern.

In considering the information and findings of these analyses regarding relationships between N deposition and N oxides and PM in ambient air, the PA considers the current forms and averaging times of the secondary PM and NO_2 NAAQS. For N oxides, the current secondary standard is the annual average of NO_2, and that for PM is the average of three consecutive years of annual averages. As in the assessments of S deposition and air quality metrics, the quantitative air quality and N deposition analyses in the PA focus on 3-year average metrics (*e.g.,* annual average NO_2 and N deposition, averaged over three years) and include multiple time periods of data to better

[73] This also excluded species for which sample sites were limited to the western U.S. based on recognition by the study authors of greater uncertainty in the west (Horn et al., 2018).

assess more typical relationships. For consistency and simplicity, most of these air quality–deposition analyses focus on the five 3-year periods also used for S deposition and SO_X: 2001–03, 2006–08, 2010–12, 2014–16 and 2018–20.

As an initial matter, the PA notes that relationships between N deposition and NO_2 and PM air quality are affected by NH_3 emissions and non-N-containing components of PM (PA, section 6.4.2). The PA further notes that the influence of these factors on the relationships has varied across the 20-year evaluation period and varies across different regions of the U.S. (PA, section 6.2.1). Both of these factors are recognized to influence relationships between total N deposition and NO_2 and PM air quality metrics.

For total N deposition estimated for grid cells with collocated SLAMS monitors, the correlations with annual average NO_2 concentrations, averaged over three years, are generally low across all sites and particularly in the East (*e.g.,* correlation coefficients below 0.4), although somewhat higher for sites in the West (PA, Table 6–6). This likely reflects the relatively greater role of NH_3 in N deposition in the East, which for purposes of the analyses in this PA extends across the Midwest (PA, section 6.4.2). For N deposition and NO_2 at upwind monitoring sites of influence, the correlation between estimates of total N deposition (wet plus dry) in eastern ecoregions and annual average NO_2 concentrations at monitor sites of influence (identified via trajectory-based modeling) for the five periods from 2001–2020 is low to moderate (correlation coefficients below 0.4, with the exception of one for EAQM-weighted in 2001–03 at 0.6), with the earlier part of the 20-year period, when NO_2 concentrations were higher and NH_3 emissions were lower (as indicated by Figures 6–6 and 6–5 of the PA) having relatively higher correlation than the later part (PA, Figures 6–6 and 6–4). The correlation is negative or near zero for the western ecoregions (PA, section 6.2.4).

The reductions in NO_2 emissions over the past 20 years have been accompanied by a reduction in deposition of oxidized N (PA, section 6.2.1). However, increases in NH_3 emissions, particularly in the latter 10 years of the period analyzed (2010–2020), have modified the prior declining trend in total N deposition. That is, coincident with the decreasing trends in NO_2 emissions and in deposition of oxidized N in the past 10 years there is a trend of increased NH_3 and increased deposition of reduced N (NH_3 and NH_4^+), most particularly in areas of the Midwest, Texas, Florida and North Carolina (PA, Figures 6–16 and 6–17). The PA finds this to indicate that, while in the earlier years of the assessment period controls on NO_2 emissions may have resulted in reductions in deposition of oxidized N, in more recent years they have much less influence on total N deposition (PA, sections 6.2.1 and 6.4). In terms of ecoregion median statistics, the PA observes the decreasing trend in ecoregion median total N deposition across the period from 2001 through 2012, while taking note that from 2012 onward total N deposition increases, most particularly in ecoregions where most of the total deposition is from reduced N (PA, Figure 7–6).

The PA also considers the impact of increasing deposition of reduced N on the 20-year trend in total N deposition as illustrated by TDep estimates at the 92 CASTNET sites. At these sites, the PA observes that the median percentage of total N deposition comprised by oxidized N species, which is driven predominantly by N oxides, has declined from more than 70% to less than 45% (PA, Figure 6–19). Based on examination of the trends for components of reduced N deposition, the PA notes that the greatest influence on the parallel increase in N deposition percentage composed of reduced N is the increasing role of NH_3 dry deposition. The percentage of total N deposition at the CASTNET sites that is from NH_3 has increased, from a median below 10% in 2000 to a median somewhat above 25% in 2021 (PA, Figure 6–19).

Recognizing limitations in the extent to which CASTNET sites can provide information representative of the U.S. as a whole, the PA also analyzed TDep estimates for the most recent period (2018–2020) with regard to the percent of total N deposition represented by reduced N across the U.S. In areas with ecoregion median total N deposition above 9 kg/ha-yr (PA, Figure 7–7, upper panel), the ecoregion median percentage of total N deposition composed of reduced N is greater than 60% (PA, Figure 7–7, lower panel). The PA further notes that recent (2019–2021) TDep estimates across individual TDep grid cells similarly show that areas of the U.S. where total N deposition is highest, and where it is greater than potential N deposition targets identified in section 7.2.3.2 of the PA, are also the areas with the greatest deposition of NH_3 (PA, Figure 7–8), comprising more than 30% of total N deposition. That is, the PA finds that NH_3 driven deposition is greatest in regions of the U.S. where total deposition is greatest (PA, section 7.2.3.3).

Turning to $PM_{2.5}$, the PA notes that, as with NO_2 concentrations, the correlation for ecoregion median N deposition and $PM_{2.5}$ concentrations at upwind sites of influence is better for eastern ecoregions than western ecoregions, for which there is no correlation at all (PA, section 6.2.4). For total N deposition and $PM_{2.5}$ concentrations at SLAMS, a low to moderate correlation is observed, also slightly higher at eastern versus western sites (PA, section 6.2.3). In considering the two factors mentioned above (NH_3 emissions and non-N containing components of PM), the PA notes that some NH_3 transforms to NH_4^+, which is a component of $PM_{2.5}$, while also noting that, in the areas of greatest N deposition, the portion represented by deposition of gaseous NH_3 generally exceeds 30%. Additionally, while NH_3 emissions have been increasing over the past 20 years, the proportion of $PM_{2.5}$ that is composed of N compounds has declined. The median percentage of $PM_{2.5}$ comprised by N compounds has declined from about 25% in 2006–2008 to about 17% in 2020–2022 and the highest percentage across sites declined from over 50% to 30% (PA, section 6.4.2 and Figure 6–56). Further, this percentages varies regionally, with sites in the nine southeast states having less than 10% of $PM_{2.5}$ mass composed of N compounds (PA, Figure 6–56).

In summary, the PA concludes that in recent years, NH_3, which is not a criteria pollutant, contributes appreciably to total N deposition, particularly in parts of the country where N deposition is highest (as illustrated by comparison of Figures 6–13 and 6–18 of the PA). The PA finds that this situation—of an increasing, and spatially variable, portion of N deposition not being derived from N oxides or PM—complicates assessment of policy options for protection against ecological effects related to N deposition associated with N oxides and PM, and for secondary standards for those pollutants that may be considered to be associated with a desired level of welfare protection. That notwithstanding, recognizing that between the NO_2 primary and secondary NAAQS, the 1-hour primary standard (established in 2010) may be the more controlling on ambient air concentrations, the PA considered analyses of SLAMS air quality data with regard to trends in annual average NO_2 concentrations (PA, Figure 7–9) and relationships between annual average NO_2 concentrations (in a single year and averaged over three years) and design

values for the existing 1-hour primary standard (PA, Figure 7–10). In so doing, the PA noted that subsequent to 2011–2012, when ecoregion median N deposition levels in 95% of the eastern ecoregions of the continental U.S.[74] have generally been at/below 11 kg N/ha-yr, annual average NO_2 concentrations, averaged across three years, have been at/below 35 ppb (PA, Figures 7–6 and 7–9). Further, the SLAMS data indicate that single-year annual average NO_2 concentrations, averaged over three years, in areas that meet the current 1-hour primary standard have generally been below approximately 35 to 40 ppb (PA, Figure 7–10). The PA recognizes, however, that this information as a whole also suggests the potential for future reductions in N oxide-related N deposition to be negated by increasing reduced N deposition.

Further, the PA notes that the results also suggest that the $PM_{2.5}$ annual average standard may provide some control of N deposition associated with PM and N oxides, but also notes that $PM_{2.5}$ monitors, while capturing some compounds that contribute to S and N deposition across the U.S., also capture other non-S and non-N related pollutants (*e.g.,* organic and elemental carbon) as part of the $PM_{2.5}$ mass (PA, section 7.2.3.3). The amounts of each category of compounds varies regionally (and seasonally), and as noted above, N compounds generally comprise less than 30% of total $PM_{2.5}$ mass (PA, section 6.3 and 6.4).

In considering relationships between air quality metrics based on indicators other than those of the existing standards and N deposition (and associated uncertainties), the PA drew on the analyses of relationships for collocated measurements and modeled estimates of N compounds other than NO_2 with N deposition in a subset of 27 CASTNET sites located in 27 Class I areas, the majority of which (21 of 27) are located in the western U.S. (PA, sections 6.2.2, 6.3 and 6.4.2). The analyses indicate that total N deposition (TDep) in these rural areas has a moderate correlation with air concentrations of nitric acid and particulate nitrate for the 20-year dataset (2000–2020) (PA, Figure 6–32). The correlations are comparable to the correlation of NO_2 with total N dep (TDep) at western SLAMS, a not unexpected observation given that more than 75% of the 27 CASTNET sites are in the West. A much lower correlation was observed at SLAMS in the East, and with the trajectory-based dataset. The PA notes that deposition at the western U.S sites is generally less affected by NH_3 (PA, section 6.4.2). Further, the observed trend of increasing contribution to N deposition of NH_3 emissions over the past decade suggests that such correlations of N deposition with oxidized N may be still further reduced in the future. Thus, the PA concludes that the evidence does not provide support for the oxidized N compounds (as analyzed at the 27 Class I sites) as indicators of total atmospheric N deposition, especially in areas where NH_3 is prevalent (PA, section 7.2.3.3).

The analyses involving N deposition and N-containing PM components at the 27 Class I area sites yield similar correlation coefficients as those for N deposition (TDep) and $PM_{2.5}$ at SLAMS monitors (PA, section 7.2.3.3 and Figures 6–33, 6–39 [upper panel], and 6–32 [left panel]). Further, the graphs of total N deposition estimates versus total N at the 27 Class I area sites indicate the calculated correlations (and slopes) likely to be appreciably influenced by the higher concentrations occurring in the first decade of the 20-year timeframe (PA, Figure 6–33). Thus, the PA concludes that the available analyses of N-containing $PM_{2.5}$ components at the small dataset of sites remote from sources also do not indicate an overall benefit or advantage over consideration of $PM_{2.5}$ (PA, section 7.4). As a whole, the PA finds that the limited dataset with varying analytical methods and monitor locations, generally distant from sources, does not clearly support a conclusion that such alternative indicators might provide better control of N deposition related to N oxides and PM over those used for the existing standards (PA, section 7.2.3.3). The PA also notes that use of the NO_3^- or particulate N measurements analyzed with deposition estimates at the 27 Class I area sites, alone or in combination with NO_2, as an indicator for a new standard would entail development of sample collection and analysis FRM/FEMs[75] and of a surveillance network.

2. CASAC Advice and Public Comments

In evaluating the adequacy of the current secondary standards for SO_X, oxides of N, and PM, in addition to evidence and air quality/exposure/risk-based information discussed above, we take note of the advice and recommendations of the CASAC, based on its review of the draft ISA and draft PA, as well as comments from the public. A limited number of public comments have been received in the docket for this review to date, including just a few comments on the draft PA, that primarily focused on technical analyses and information, which were considered in developing the final PA (PA, section 1.4). The few public commenters that addressed the adequacy of the current secondary standards or potential alternative options to achieve appropriate public welfare protection expressed the view that the available evidence does not indicate the need for revision of the existing standards. The remainder of this section focuses on advice and recommendations from the CASAC regarding the standards review based on the CASAC's review of the draft PA.

In reviewing the draft PA, the CASAC first recognized that ''translation of deposition-based effects to an ambient concentration in air is fraught with difficulties and complexities'' (Sheppard, 2023, pp. 1–2). Further, the CASAC expressed its view that, based on its interpretation of the Clean Air Act, NAAQS could be in terms of atmospheric deposition, which it concluded ''would be a cleaner, more scientifically defensible approach to standard setting.'' Accordingly, the CASAC recommended that direct atmospheric deposition standards be considered in future reviews (Sheppard, 2023, pp. 2 and 5). The CASAC then, as summarized below, provided recommendations regarding standards based on air concentrations.

With regard to protection from effects other than those associated with ecosystem deposition of S and N compounds, the CASAC concluded that the existing SO_2 and NO_2 secondary standards provide adequate protection for direct effects of those pollutants on plants and lichens, providing consensus recommendations that these standards should be retained without revision for this purpose (Sheppard, 2023, p. 5 of letter and p. 23 of Response to Charge Questions). With regard to deposition-related effects of S and N compounds, the CASAC members did not reach consensus, with their advice divided between a majority opinion and a minority opinion. Advice conveyed from both the majority and minority groups of members concerning deposition-related effects is summarized here.

With regard to deposition-related effects of S and standards for SO_X, the majority of CASAC members recommended a new annual SO_2

[74] As noted in the PA, the eastern designation used throughout PA includes areas generally considered the Great Plains, while the West includes the states of ND, SD, CO, WY, MT, AZ, NM, UT, ID, CA, OR, WA (PA, p. 5–20).

[75] For example, sampling challenges have long been recognized for particulate NH_4^+ (*e.g.,* ISA, Appendix 2, sections 2.4.5; 2008 ISA, section 2.7.3).

standard with a level in the range of 10 to 15 ppb,[76] which these members concluded would generally maintain ecoregion median S deposition below 5 kg/ha-yr[77] based on consideration of the trajectory-based SO_2 analyses (and associated figures) in the draft PA (Sheppard, 2023, Response to Charge Questions, p. 25). They concluded that such a level of S deposition would afford protection for tree and lichen species[78] and aquatic ecosystems. Regarding aquatic ecosystems, these members cited the ecoregion-scale estimates (from the aquatic acidification REA analyses) associated with median S deposition bins for the 90 ecoregion-time period combinations (PA, section 5.1.3.2) in conveying that for S deposition below 5 kg/ha-yr, 80%, 80% and 70% of waterbodies per ecoregion are estimated to achieve an ANC at or above 20, 30 and 50 μeq/L, respectively, in all ecoregion-time period combinations (Sheppard, 2023, Response to Charge Questions, p. 25).[79] In recommending an annual SO_2 standard with a level in the range of 10 to 15 ppb, these members stated that such a standard would ''preclude the possibility of returning to deleterious deposition values as observed associated with the emergence of high annual average SO_2 concentrations near industrial sources in 2019, 2020, and 2021,'' citing Figure 2–25 of the draft PA[80] (Sheppard, 2023, Response to Charge Questions, p. 24).

One CASAC member dissented from this recommendation for an annual SO_2 standard[81] and instead recommended adoption of a new 1-hour SO_2 secondary standard identical in form, averaging time, and level to the existing primary standard based on the conclusion that the ecoregion 3-year average S deposition estimates for the most recent periods are generally below 5 kg/ha-yr and that those periods correspond to the timing of implementation of the existing primary SO_2 standard (established in 2010), indicating the more recent lower deposition to be a product of current regulatory requirements (Sheppard, 2023, Appendix A, p. A–2).[82]

With regard to N oxides and protection against deposition-related welfare effects of N, the majority of CASAC members recommended revision of the existing annual NO_2 standard to a level ''<10–20 ppb'' (Sheppard, 2023, Response to Charge Questions, p. 24). The justification these members provided was related to their consideration of the relationship presented in the draft PA of median ecosystem N deposition with the weighted[83] annual average NO_2 metric concentrations, averaged over three years, at monitoring sites linked to the ecosystems by trajectory-based analyses and a focus on total N deposition estimates at or below 10 kg/ha-yr (Sheppard, 2023, Response to Charge Questions, p. 24). These members additionally recognized, however, that ''when considering all ecoregions, there is no correlation between annual average NO_2 and N deposition'' (Sheppard, 2023, Response to Charge Questions, p. 24). Their focus on total N deposition estimates at or below 10 kg/ha-yr appears to relate to consideration of TMDL analyses in four East Coast estuaries: Chesapeake Bay, Tampa Bay, Neuse River Estuary and Waquoit Bay (Sheppard, 2023, Response to Charge Questions, pp. 12–14 and 29). Levels identified for allocation of atmospheric N loading in the first three of these estuaries were 6.1, 11.8 and 6.9[84] kg/ha-yr, respectively, and atmospheric loading estimated in the fourth was below 5 kg/ha-yr (Sheppard, 2023, Response to Charge Questions, pp. 12–14). These members also conclude that 10 kg N/ha-yr is ''at the middle to upper end of the N critical load threshold for numerous species effects (*e.g.,* richness) and ecosystem effects (*e.g.,* tree growth) in U.S. forests grasslands, deserts, and shrublands (*e.g.,* Pardo et al., 2011; Simkin et al., 2016) and thus 10 kg N/ha-yr provides a good benchmark for assessing the deposition-related effects of NO_2 in ambient air'' (Sheppard, 2023, Response to Charge Questions, p. 23).

One CASAC member disagreed with revision of the existing annual NO_2 standard and instead recommended adoption of a new 1-hour NO_2 secondary standard identical in form, averaging time and level to the existing primary standard based on the conclusion that the N deposition estimates for the most recent periods generally reflect reduced deposition that is a product of current regulatory requirements, including implementation of the existing primary standards for NO_2 and PM (Sheppard, 2023, Appendix A). This member additionally noted that bringing into attainment the areas still out of attainment with the 2013 primary annual $PM_{2.5}$ standard (12.0 $\mu g/m^3$) will provide further reductions in N deposition. This member also noted his analysis of NO_2 annual and 1-hour design values for the past 10 years (2013–2022) as indicating that the current primary NO_2 standard provides protection for annual average NO_2 concentrations below 31 ppb (Sheppard, 2023, Appendix A).

With regard to PM and effects related to deposition of N and S, the CASAC focused on the $PM_{2.5}$ standards and made no recommendations regarding the PM_{10} standard. In considering the annual $PM_{2.5}$ standard, the majority of CASAC members recommended revision of the annual secondary $PM_{2.5}$ standard to a level of 6 to 10 $\mu g/m^3$. In their justification for this range, these

[76] Although the CASAC letter does not specify the form for such a new annual standard, the justification provided for this recommendation cites two figures in the draft PA (Figures 6–17 and 6–18) which presented annual average SO_2 concentrations averaged over three consecutive years (Sheppard, 2023, Response to Charge Questions, p. 25). Therefore, we are interpreting the CASAC majority recommendation to be for an annual standard, averaged over three years.

[77] Although the CASAC letter does not specify the statistic for the 5 kg/ha-yr value, the PA analyses referenced in citing that value, both the trajectory analyses and the ecoregion-scale summary of aquatic acidification results, focus on ecoregion medians. Therefore, we are interpreting the CASAC advice on this point to pertain to ecoregion means.

[78] In making this statement, these CASAC members cite two observational data studies with national-scale study areas published after the literature cut-off date for the ISA: one study is on lichen species richness and abundance and the second is on tree growth and mortality (Geiser et al., 2019; Pavlovic et al., 2023). The lichen study by Geiser et al. (2019) relies on lichen community surveys conducted at U.S. Forest Service sites from 1990 to 2012. The tree study by Pavlovic et al. (2023) uses machine learning models with the dataset from the observational study by Horn et al. (2018) to estimate confidence intervals for CLs for growth and survival for 108 species based on the dataset first analyzed by Horn et al. (2018).

[79] As seen in tables 3 and 4 in this preamble, these levels of protection are also achieved in ecoregion-time period combinations for which the ecoregion median S deposition estimate is at or below 7 kg/ha-yr (PA, section 7.2.2.2, Table 7–1).

[80] The figure cited by the CASAC majority is the prior version of Figure 2–28 in section 2.4.2 of the final PA. The figure presents temporal trend in distribution (box and whiskers) of annual average SO_2 concentrations at SLAMS.

[81] Also dissenting from this advice was a member of the CASAC Oxides of Nitrogen, Oxides of Sulfur and Particulate Matter Secondary NAAQS Panel who was not also a member of the CASAC (Sheppard, 2023, Response to Charge Questions, p. 23). The former is a Panel formed for this review, while the latter is the standing Committee specified in the CAA.

[82] This member stated that the existing primary NAAQS for the three pollutants were significantly more restrictive than the existing secondary standards and provide adequate protection for deposition-related effects (Sheppard, 2023, Appendix A).

[83] The weighted metric is constructed by applying weighting to concentrations to the monitors identified as sites of influence, with the weighting equal to the relative contribution of air from the monitor location to the downwind ecoregion based on the trajectory analysis (PA, section 6.2.4). Values of this metric are not directly translatable to individual monitor concentrations or to potential standard levels.

[84] The CASAC letter states that the Neuse River Estuary TMDL specified a 30% reduction from the 1991–1995 loading estimate of 9.8 kg/ha-yr, yielding a remaining atmospheric load target of 6.9 kg/ha-yr (Sheppard, 2023, Response to Charge Questions, p. 13).

members focus on rates of total N deposition at or below 10 kg/ha-yr and total S deposition at or below 5 kg/ha-yr that they state would ''afford an adequate level of protection to several species and ecosystems across the U.S.'' (Sheppard, 2023, Response to Charge Questions, p. 23). In reaching this conclusion for protection from N deposition, the CASAC majority cited studies of U.S. forests, grasslands, deserts and shrublands that are included in the ISA. For S deposition, the CASAC majority notes the Pavlovic et al. (2023) analysis of the dataset used by Horn et al. (2018). Conclusions of the latter study (Horn et al., 2018), which is characterized in the ISA and discussed in sections 5.3.2.3 and 7.2.2.2 of the PA (in noting median deposition of 5–12 kg S/ha-yr in ranges of species for which survival and/or growth was observed to be associated with S deposition), are consistent with the more recent analysis in the 2023 publication (ISA, Appendix 6, sections 6.2.3 and 6.3.3).

As justification for their recommended range of annual $PM_{2.5}$ levels (6–10 μg/m^3), this group of CASAC members made several statements regarding $PM_{2.5}$ annual concentrations and estimates of S and N deposition for which they cited several figures in the draft PA. Citing figures in the draft PA with TDep deposition estimates and IMPROVE and CASTNET monitoring data, they stated that ''[i]n remote areas, IMPROVE $PM_{2.5}$ concentrations in the range of 2–8 μg/m^3 for the periods 2014–2016 and 2017–2019 correspond with total S deposition levels <5 kg/ha-yr (Figure 6–12), with levels generally below 3 kg/ha-yr, and with total N deposition levels ≤10 kg/ha-yr (Figure 6–13)'' (Sheppard, 2023, Response to Charge Questions, p. 23). With regard to S deposition, these members additionally cited a figure in the draft PA as indicating ecosystem median S deposition estimates at/below 5 kg/ha-yr occurring with $PM_{2.5}$ EAQM-max values in the range of 6 to 12 μg/m^3 (Sheppard, 2023, Response to Charge Questions, pp. 23–24). These members additionally cited figures in the draft PA as indicating that areas of 2019–2021 total N deposition estimates greater than 15 kg/ha-yr (in California, the Midwest, and the East) correspond with areas where the annual $PM_{2.5}$ design values for 2019–2021 range from 6 to 12 μg/m^3, and other figures (based on trajectory analyses) as indicating ecosystem median N deposition estimates below 10 kg N/ha-yr occurring only with $PM_{2.5}$ weighted EAQM values below 6 μg/m^3,[85] and $PM_{2.5}$ EAQM-max values below 8 μg/m^3 (Sheppard, 2023, Response to Charge Questions, pp. 23–24). The CASAC also noted that the correlation coefficient for N deposition with the weighted EAQM is 0.52, while the correlation coefficient with the EAQM-max is near zero (0.03). The bases for the N and S deposition levels targeted in this CASAC majority recommendation are described in the paragraphs earlier in this section.

One CASAC member recommended revision of the annual secondary $PM_{2.5}$ standard to a level of 12 μg/m^3 based on his interpretation of figures in the draft PA that present S and N deposition estimates for five different 3-year time periods from 2001 to 2020. This member observed that these figures indicate ecoregion median S and N deposition estimates in the last 10 years below 5 and 10 kg/ha-yr, respectively. This member concluded this to indicate that the 2013 primary annual $PM_{2.5}$ standard of 12.0 μg/m^3 provides adequate protection against long-term annual S and N deposition-related effects (Sheppard, 2023, Appendix A).

Regarding the existing 24-hour $PM_{2.5}$ secondary standard, the majority of CASAC members recommended revision of the level to 25 ug/m^3 or revision of the indicator and level to deciviews[86] and 20 to 25, respectively (Sheppard, 2023, Response to Charge Questions, p 25). These members variously cited ''seasonal variabilities'' of ''[e]cological sensitivities,'' describing sensitive lichen species to be influenced by fog or cloud water from which they state S and N contributions to be highly episodic, and visibility impairment (Sheppard, 2023, Response to Charge Questions, p 25). These members did not provide further specificity regarding their reference to lichen species and fog or cloud water. With regard to visibility impairment, these members described the EPA solicitation of comments that occurred with the separate EPA action to reconsider the 2020 decision to retain the existing $PM_{2.5}$ standards as the basis for their recommendations on the secondary 24-hr $PM_{2.5}$ standard (Sheppard, 2023, Response to Charge Questions, p 25; 88 FR 5562–5663, January 27, 2023).[87] One CASAC member dissented from this view and supported retention of the existing secondary 24-hr $PM_{2.5}$ standard.

Among the CASAC comments on the draft PA[88] was the comment that substantial new evidence has been published since development of the 2020 ISA that supports changes to the draft PA conclusions on N deposition effects. Accordingly, in the final PA, a number of aspects of chapters 4 and 5 were revised from the draft PA; these changes took into account the information emphasized by the CASAC while also referring to the ISA and studies considered in it (PA, section 7.3). More recent studies cited by the CASAC generally concerned effects described in the ISA based on studies available at that time. While the newer studies include additional analyses and datasets, the ISA and studies in it also generally support the main points raised and observations made by the CASAC (PA, section 7.3).

3. Administrator's Proposed Conclusions

In considering the adequacy of the existing secondary standards for SO_X, N oxides, and PM, and what revisions or alternatives are appropriate, the Administrator has drawn on the ISA conclusions regarding the weight of the evidence for both the direct effects of SO_X, N oxides, and PM in ambient air and for effects associated with ecosystem deposition of N and S compounds, and associated areas of uncertainty; quantitative analyses of aquatic acidification risk and of air quality and deposition estimates, and associated limitations and uncertainties; staff evaluations of the evidence, exposure/risk information, and air quality information in the PA; CASAC advice; and public comments received thus far in the review. In considering the available information in this review, the Administrator recognizes the evidence of direct biological effects associated with elevated short-term concentrations of SO_X and N oxides that formed the basis for the existing secondary SO_2 and NO_2 standards, the evidence of ecological effects of PM in

[85] As noted earlier in this section, weighted EAQM values are not directly translatable to concentrations at individual monitors or to potential standard levels.

[86] Deciviews, units derived from light extinction, are frequently used in the scientific and regulatory literature to assess visibility (U.S. EPA 2019, section 13.2).

[87] Protection from impairment of visibility effects was one of the welfare effects within the scope of the PM NAAQS reconsideration rather than the scope of this review (U.S. EPA, 2016, 2017). In that action, the Administrator proposed not to change the 24-hour secondary PM NAAQS for visibility protection and also solicited comment on revising the level of the current secondary 24-hour $PM_{2.5}$ standard to a level as low as 25 μg/m^3; in the final action, the Administrator concluded that the current secondary PM standards provide requisite protection against PM-related visibility effects and retained the existing standards without revision (88 FR 5558, January 27, 2023; 89 FR 16202, March 6, 2024).

[88] Consideration of CASAC comments and areas of the PA in which revisions have been made between the draft and this final document are described in section 1.4 of the PA.

ambient air, primarily associated with loading on vegetation surfaces, and also the extensive evidence of ecological effects associated with atmospheric deposition of N and S compounds into sensitive ecosystems. The Administrator also takes note of the quantitative analyses and policy evaluations documented in the PA that, with CASAC advice, inform his judgments in reaching his proposed decision on the secondary standards for SO_X, N oxides, and PM that provide the requisite protection under the CAA.

In reaching his proposed conclusions for the pollutants included in this review, the Administrator considers first the secondary standard for SO_X and the adequacy of the existing standard for providing protection of the public welfare from direct effects on biota and from ecological effects related to ecosystem deposition of S compounds. In so doing, he considers the evidence regarding direct effects, as described in the ISA and evaluated in the PA, which is focused on SO_2. He takes note of the PA finding that the evidence indicates SO_2 concentrations associated with direct effects to be higher than those allowed by the existing SO_2 secondary standard (PA sections 5.4.1, 7.1.1 and 7.4). Additionally, he takes note of the CASAC unanimous conclusion that the existing standard provides protection from direct effects of SO_X in ambient air, as summarized in section II.E.2 above. Based on all of these considerations, he judges the existing secondary SO_2 standard to provide the needed protection from direct effects of SO_X. He next turns to consideration of ecological effects related to ecosystem deposition of S compounds.

With regard to S deposition-related effects, as an initial matter, the Administrator recognizes the long-standing evidence of the role of SO_X in ecosystem acidification and related ecological effects. While he additionally notes the ISA determinations of causality for S deposition with two other categories of effects related to mercury methylation and sulfide phytotoxicity (ISA, Table ES–1; PA, section 4.4), he recognizes that quantitative tools and approaches are not well developed for ecological effects associated with atmospheric deposition of S other than ecosystem acidification (PA, section 7.2.2.1). Thus, he gives primary attention to effects related to acidifying deposition, given the robust evidence base and available quantitative tools, as well as the longstanding recognition of impacts in acid-sensitive ecosystems across the U.S. Accordingly, the Administrator takes note of the findings of the aquatic acidification REA and related policy evaluations in the PA. As summarized in the PA, the REA findings include that the range of ecoregion median deposition estimates across the contiguous U.S. analyzed during the 20-year period from 2001 through 2020 extended up to as high as 20 kg S/ha-yr, and that, except for one occasion (in 2011), the existing secondary SO_2 standard was met in all states but Hawaii. Further, other than the design value in 2011, design values for the existing SO_2 standard (second highest 3-hour average in a year) were well below its current level of 500 ppb (PA, section 6.2.1). For example, in the earliest 3-yr period analyzed (2001–03), when virtually all design values for the existing 3-hour secondary standard were below 400 ppb and the 75th percentile of design values was below 100 ppb (PA, Figure 2–27), total S deposition was estimated to be greater than 14 kg/ha-yr across the Ohio River valley and Mid-Atlantic states, ranging above 20 kg/ha-yr in portions of this area (PA, Figure 6–11). The PA also notes that the magnitude of S deposition estimates at the 90th percentile per ecoregion at sites assessed in the aquatic acidification REA was at or above 15 kg/ha-yr in half of the 18 eastern ecoregions and ranged up to nearly 25 kg/ha-yr during this time period (Figure 2; PA, Figure 7–2). The Administrator also takes note of the aquatic acidification risk estimates that indicate that this pattern of S deposition, estimated to have occurred during periods when the existing standard was met (*e.g.,* 2000–2002), is associated with 20% to more than half of waterbody sites in affected eastern ecoregions [89] being unable to achieve even the lowest of the three acid buffering capacity targets or benchmarks (ANC of 20 μeq/L), and judges such risks to be of public welfare significance.

The Administrator also considers the advice from the CASAC in considering deposition-related effects of S. Although the CASAC provided two sets of advice regarding standards for protecting from such effects, both the majority and the minority of CASAC recommended adoption of a new SO_2 standard for this purpose in light of conclusions that the existing standard did not provide such needed protection. Thus, based on the findings of the REA, associated policy evaluations in the PA with regard to S deposition and acidification-related effects in sensitive ecosystems, and in consideration of advice from the CASAC, the Administrator proposes to judge that the current SO_2 secondary standard is not requisite to protect the public welfare from adverse effects associated with acidic deposition of S compounds in sensitive ecosystems.

Having reached this proposed conclusion that the existing secondary SO_2 standard does not provide the requisite protection of the public welfare from adverse S deposition-related effects, most prominently those associated with aquatic acidification, the Administrator next considers options for a secondary standard that would provide the requisite protection from S deposition-related effects. In so doing, he turns first to the policy evaluations and staff conclusions in the PA, and the quantitative analyses and information described in Chapter 5 of the PA, for purposes of identifying S deposition rates that might be judged to provide an appropriate level of public welfare protection from acidification-related effects. In this context, he takes note of the PA focus on the aquatic acidification risk estimates and the PA recognition of linkages between watershed soils and waterbody acidification, as well as terrestrial effects. He concurs with the PA view that such linkages indicate that protecting waterbodies from reduced acid buffering capacity (with ANC as the indicator) will also, necessarily, provide protection for watershed soils, and may reasonably be expected to also contribute protection for terrestrial effects. Accordingly, he considers the PA evaluation of the risk estimates in terms of waterbodies estimated to achieve the three acid buffering capacity benchmarks (20, 30 and 50 μeq/L). Further, he concurs with the PA consideration of the ecosystem-scale estimates as appropriate for his purposes in identifying conditions that provide the requisite protection of the public welfare.

In focusing on the ecoregion-scale findings of the aquatic acidification REA, with particular attention to the 18 well studied, acid-sensitive eastern ecoregions, the Administrator considers the PA evaluation of ecoregion median S deposition values at and below which the associated risk estimates indicated a high proportion of waterbodies in a high proportion of ecoregions would achieve ANC values at or above the three benchmarks (20, 30 and 50 μeq/L), as summarized in Tables 7–1 and 5–5 of the PA. In so doing, he recognizes a number of factors, as described in the PA, which contribute variability and

[89] Aquatic acidification risk estimates for the 2001–2020 deposition estimates in the eight western ecoregions indicated ANC levels achieving all three targets in at least 90% of all sites assessed in each ecoregion (PA, Table 5–4). Ecoregion median deposition estimates were at or below 2 kg/ha-yr in all eight western ecoregions (PA, Table 5–3).

uncertainty to waterbody estimates of ANC and to interpretation of acidification risk associated with different values of ANC (PA, section 5.1.4 and Appendix 5A, section 5A.3).

The Administrator additionally takes note of the approach taken by the CASAC majority in considering the ecoregion-scale risk estimates (summarized in section II.E.2 above). These members considered the summary of results for the ecoregion-scale analysis of ecoregion median deposition bins (in the draft PA [90]) and focused on a level of deposition (at or below 5 kg/ha-yr) estimated to achieve acid buffering capacity at or above the three ANC benchmarks in 80% (for ANC of 20 and 30 μeq/L) or 70% (for ANC of 50 μeq/L) of waterbodies in all ecoregion-time period combinations [91] (Sheppard, p. 25 of the Response to Charge Questions). As additionally recognized in the PA, the results for ecoregion-time period combinations for median S-deposition in the 18 eastern ecoregions at or below 7 kg/ha-yr also indicate these percentages of waterbodies achieving the three ANC benchmarks (as seen in Tables 7–1 and 5–5 above).[92] The results for median S deposition at or below 7 kg/ha-yr further indicate that 90% of waterbodies per ecoregion achieve ANC at or above 20, 30 and 50 μeq/L in 96%, 92% and 82%, respectively, of eastern ecoregion-time period combinations. For median S deposition at or below 9 kg/ha-yr, the percentages of eastern ecoregions meeting or exceeding the ANC benchmarks declines to 87%, 81% and 72% (as summarized in section II.E.1.c(2) above), and the percentages for all 25 analyzed ecoregions is higher.

The Administrator additionally considers the PA evaluation of the temporal trend or pattern of ecoregion-scale risk estimates across the five time periods in relation to the declining S deposition estimates for those periods. As summarized in section II.E.1.b above, based on the observation of appreciably improved acid buffering capacity (*i.e.,* increased ANC) estimates by the third time period (2010–2012), the PA focused on the REA risk and deposition estimates for this and subsequent periods. The S deposition estimated to be occurring in the 2010–2012 time period included ecoregion medians (across CL sites) ranging from 2.3 to 7.3 kg/ha-yr in the 18 eastern ecoregions and extending down below 1 kg/ha-year in the 7 western ecoregions; the highest ecoregion 90th percentile was approximately 8 kg/ha-yr (table 5 and figure 2 above). For this pattern of deposition, more than 70% of waterbodies per ecoregion are estimated to be able to achieve an ANC of 50 ueq/L in all 25 ecoregions (Figure 1, left panel), and more than 80% of waterbodies per ecoregion in all ecoregions are estimated to be able to achieve an ANC of 20 ueq/L (Figure 1, right panel). Further, by the 2014–2016 period, when both median and 90th percentile S deposition in all 25 ecoregions was estimated to be at or below 5 kg/ha-yr, more than 80% of waterbodies per ecoregion are estimated to be able to achieve an ANC of 50 ueq/L in all 25 ecoregions (more than 90% in 23 of the 25 ecoregions) and more than 90% of waterbodies per ecoregion in all ecoregions are estimated to be able to achieve an ANC of 20 ueq/L (Figure 1, right panel).

The Administrator observes that the estimates of acid buffering capacity achievement for the 2010–12 period deposition—achieving the ANC benchmarks in at least 70% to 80% (depending on the specific benchmark) of waterbodies per ecoregion—are consistent with the objectives identified by the CASAC majority (in considering estimates from the ecoregion-scale analysis). The advice from the CASAC majority emphasized ecoregion ANC achievement estimates of 70%, 80% and 80% for ANC benchmarks of 50, 30 and 20 μeq/L, respectively. The estimates for the later time period are somewhat higher, with all ecoregions estimated to achieve the ANC benchmarks in at least 80% to 90% (depending on the benchmarks) of waterbodies per ecoregion. In his consideration of these ANC achievement percentages identified by the CASAC, the Administrator notes the variation across the U.S. waterbodies with regard to site-specific factors that affect acid buffering (as summarized in sections II.C.1.b(1) and II.D.1 above and section 5.1.4 of the PA). Based on this and the CASAC majority advice, the Administrator concurs with the PA conclusion that both of these ecoregion-scale ANC achievement results (70% to 80% and 80% to 90%) may be reasonable to consider with regard to acid buffering capacity objectives for the purposes of protecting ecoregions from aquatic acidification risk of a magnitude with potential to be considered of public welfare significance.

With regard to the variation in deposition across areas within ecoregions, the Administrator notes the PA recognition that the sites estimated to receive the higher levels of deposition are those most influencing the extent to which the potential objectives for aquatic acidification protection are or are not met. He further takes note of the PA observation of an appreciable reduction across the 20-year analysis period in the 90th percentile deposition estimates, as well as the median, for REA sites in each of the 25 ecoregions analyzed. Although the ecoregion 90th percentile and median estimates ranged up to 22 and 15 kg/ha-yr in the 2001–2003 time period, both types of estimates fall below approximately 5 to 8 kg/ha-yr by the 2010–2012 period (PA, Figure 7–2). In light of this trend, as well as the temporal trend in the REA estimates, the Administrator takes note of the PA findings that the ecoregion-scale acid buffering objectives identified by the CASAC (more than 70% to 80% of waterbody sites in all ecoregions assessed achieving or exceeding the set of ANC benchmarks) might be expected to be met when ecoregion median and upper (90th) percentile deposition estimates at sensitive ecoregions are generally at and below about 5 to 8 kg/ha-yr. He additionally takes note of the PA recognition of uncertainties associated with the deposition estimates at individual waterbody sites and with the associated estimates of aquatic acidification risk (PA, section 5.1.4), and with the PA's consideration of estimates from the case study analyses, which together leads the PA to identify deposition rates at and below about 5 to 8 or 10 [93] kg/ha-yr as associated with a potential to achieve acid buffering capacity benchmarks in an appreciable portion of acid sensitive areas. Based on all of these considerations, the Administrator focuses on this range of deposition levels in turning his attention to identification of a secondary standard that might be associated with S deposition of such a magnitude.

[90] While the final PA provides additional presentations of aquatic acidification risk estimates, including those at the ecoregion-scale, the estimates are unchanged from those in the draft PA (PA, section 5.1.3).

[91] The presentation of such percentages in the draft PA (reviewed by the CASAC) were specific to the 90 ecoregion-time period combinations for the 18 eastern ecoregions. Inclusion of the 7 western ecoregions would yield higher percentages, as more than 90% of waterbodies in those ecoregions were estimated to achieve all three ANC concentration in all time periods (PA, Table 5–4).

[92] Ecoregion median deposition was below 2 kg S/ha-yr in all 35 ecoregion-time period combinations for the eight western ecoregions (PA, Table 5–4).

[93] Consideration of the case study analyses as well as the ecoregion-scale results for both the ecoregion-time period and temporal perspectives, indicates a range of S deposition below approximately 5 to 8 or 10 kg/ha-yr, on an areawide basis, to be associated with a potential to achieve acid buffering capacity levels of interest in an appreciable portion of acid sensitive areas (PA, section 7.4).

In considering options for a secondary standard based on consideration of S deposition-related effects, the Administrator takes note of the complexity of identifying a national ambient air quality standard focused on protection of the public welfare from adverse effects associated wth national patterns of atmospheric deposition (rather than on protection from direct exposure from patterns of ambient air concentrations of concern). As more specifically described in the PA, atmospheric deposition (ecosystem loading) of S, is, in a simple sense, the product of atmospheric concentrations of S compounds, factors affecting S transfer from air to surfaces, and time. Further, atmospheric concentrations in an ecosystem are, themselves, the result of emissions from multiple, distributed sources (near and far), atmospheric chemistry, and transport. Accordingly, the Administrator concurs with the PA judgment that consideration of the location of source emissions and expected pollutant transport (in addition to the influence of physical and chemical processes) is important to understanding relationships between SO_2 concentrations at ambient air monitors and S deposition rates in sensitive ecosystems of interest. Based on these considerations in the PA, the Administrator concurs that to achieve a desired level of protection from aquatic acidification effects associated with S deposition in sensitive ecosystems, SO_2 emissions must be controlled at their sources, and that associated NAAQS compliance monitoring is at regulatory SO_2 monitors generally sited near large SO_2 emissions sources.

Further, the Administrator considers findings of the PA analyses of relationships between ambient air concentrations and S deposition estimates, conducted in recognition of the variation across the U.S. in the source locations and magnitude of SO_X emissions, as well as the processes that govern transport and transformation of SO_X to eventual deposition of S compounds. These analyses consider relationships between S deposition estimates and SO_2 concentrations near SO_2 monitors (both at NAAQS regulatory monitors, which are often near large sources of SO_2 emissions, and in remote Class I areas) as well as relationships between ecoregion S deposition estimates and SO_2 concentrations at upwind sites of influence, identified by trajectory analyses to account for the relationship between upwind concentrations near sources and deposition in downwind areas (section II.B above and PA, sections 6.2.2 through 6.2.4,). As evidence of the influence of SO_2 in ambient air on S deposition, all of these analyses demonstrated there to be an association between SO_2 concentrations and nearby or downwind S deposition (PA, section 7.4). The PA found the correlation coefficients to be strongest in the East and in the earliest two to three time periods, when deposition rates and air concentrations were much higher compared to the West and to more recent years, when deposition rates and concentrations are much lower (PA, Chapter 6).

With regard to an indicator for a standard to address the effects of S deposition, the Administrator also takes note of the findings of the PA analyses and the parallel trends of SO_2 emissions and S deposition in the U.S. over the past 20 years that indicate the strong influence of SO_2 in ambient air on S deposition (PA, sections 6.4.1 and 7.4). The array of air quality analyses in the PA together illustrate the fact that atmospheric loading is a primary, but not the only, determinant of atmospheric deposition, as well as the complexity of how to consider concentrations at individual monitors, with variable spatial distribution, in relation to deposition rates. The distribution of monitor SO_2 concentrations is appreciably flatter in the latter 10 years of the analysis period in comparison to the initial years, and S deposition rates during the latter 10 years are appreciably reduced from those in the earlier decade (PA, Figure 7–5). These parallel patterns indicate a broader distribution of concentrations across NAAQS monitors during these years. Additionally, the Administrator notes the PA finding of parallel temporal trends of ecoregion S deposition estimates and the REA aquatic acidification risk estimate across the five time periods analyzed.

In light of all of the linkages connecting SO_X emissions and S deposition-related effects, the Administrator considers the current information with regard to a new or revised standard for SO_X that would be expected to provide protection from aquatic acidification-related risks of S deposition in sensitive ecoregions. With regard to the indicator for such a standard, he notes the PA findings of support for SO_2 as a good indicator for a secondary standard to address S deposition (PA, sections 6.4.1 and 7.4). This support includes the declining trend of S deposition that is consistent with and parallel to the sharp declines in annual average SO_2 emissions across the 20-year period, as well as the general association of SLAMS with higher annual average SO_2 concentrations with higher local S deposition estimates in addition to the high correlations observed for ecoregion median S deposition with upwind SO_2 monitoring sites of influence in the EAQM analyses. In light of all of these considerations, the Administrator judges SO_2 to be the appropriate indicator for a standard addressing S deposition-related effects.

With regard to the appropriate averaging time and form for such a standard, the Administrator takes note of the PA findings and advice from the CASAC. In the quantitative analyses of air quality and deposition, the PA generally focused on a year's averaging time based on the recognition that longer-term averages (such as over a year) most appropriately relate to deposition and associated ecosystem effects. The PA analyses also used a 3-year average form based on a recognition in the NAAQS program that such a form affords stability to the associated air quality management program that contributes to effective environmental protection. Similarly, in the advice of the CASAC majority on a standard addressing S deposition, these members recommended an annual average standard, and the information considered by the CASAC majority in drawing its conclusion also focused on an annual average SO_2 metric with a form that involved averaging over three consecutive years, implying that to be the recommended form (section II.E.2 above). In consideration of these conclusions of the PA and the CASAC majority, the Administrator focuses on annual average SO_2 concentrations, averaged over three years, as providing an averaging time and form [94] that he judges appropriate for providing public welfare protection from adverse effects associated with long-term atmospheric deposition of S compounds.

In turning to consideration of a level for such a standard, as an initial matter, the Administrator again notes the complexity (recognized above) associated with identifying a national ambient air quality standard focused on protection from national patterns of atmospheric deposition rather than on protection from patterns of direct exposure to SO_2. As summarized in the PA, atmospheric deposition rates are a function of atmospheric loading, transformation, and transport, and are

[94] A 3-year form is common to NAAQS adopted over the more recent past. This form provides a desired stability to the air quality management programs which is considered to contribute to improved public health and welfare protection (*e.g.,* 78 FR 3198, January 15, 2013; 80 FR 65352, October 26, 2015; 85 FR 87267, December 31, 2020).

not a one-to-one function of concentration at a specific monitoring location. Thus, the maximum concentration at a single upwind site is less important for total loading than the combined impact of all upwind emissions sources. This contributes uncertainty to the identification of the appropriate level for a national standard based on a single maximum concentration that, if occurring at any one or multiple locations, would be expected to constrain areawide deposition rates downwind to the desired level for protection. The atmospheric loading (and deposition) associated with the maximum concentration conceptually represented by a standard level depends on the number and spatial distribution of areas exhibiting that concentration. Reductions in deposition reflect geographically-broad emissions reductions and weighted concentration reductions (*e.g.,* EAQM-weighted) more than reductions in the maximum concentration at individual locations. As shown by the 20-year trends in annual emissions and monitor annual average SO_2 concentrations, the percentage reductions in deposition and emissions are greater than those in the highest monitor concentrations.[95] Particularly in this case of identifying a standard to provide a pattern of ambient air concentrations that together contribute to deposition across the U.S., it is important to consider the distribution of air concentrations to which the standard will apply. The Administrator takes note of this complexity and associated uncertainty in his identification of a level for an annual average SO_2 standard for S deposition.

In considering an appropriate range of concentrations for a level for such a standard, the Administrator considers the evaluations and associated findings of the PA and advice from the CASAC. In considering the PA analyses and evaluation, the Administrator takes note of the uncertainties associated with potential limitations in the monitoring dataset across the 20-year period (*e.g.,* with regard to the representation of source locations in the earlier years of the monitoring data), in addition to the complexities described above. In so doing, the Administrator considers the two options identified in the PA for a level of an annual average standard, with a 3-year average form. One option identified in the PA would establish a level in the range of somewhat below 15 ppb to a level of 10 ppb, and a second option would establish a standard with a level within the range of 10 to 5 ppb. He additionally recognizes there to be uncertainties in aspects of the aquatic acidification risk modeling that contribute uncertainty to the resulting estimates, and in the significance, of aquatic acidification risk, which he finds to be greater with lower deposition levels (PA, section 5.1.4). Further, the Administrator takes note of the additional and appreciably greater uncertainty recognized in the PA to be associated with consideration of a standard level below 10 ppb, including uncertainties in the relationships between S deposition and annual average SO_2 concentrations below 10 ppb (PA, Chapter 6, section 7.4). In general, there is uncertainty in identifying a specific level for a standard that may be expected to achieve a particular degree of S deposition-related protection for ecological effects. This uncertainty is coupled with the uncertainty associated with estimates of aquatic acidification risk in waterbodies across the U.S. associated with specific deposition levels, including with regard to interpretation of risk associated with different levels of acid buffering capacity. In this context and based on the PA findings, the Administrator recognizes there to be, on the whole across the various linkages, increased uncertainty for lower SO_2 concentrations and S deposition rates.

The Administrator additionally considers the CASAC majority recommended range of levels for an annual average SO_2 standard to address S deposition-related ecological effects. As described in section II.E.2 above, the majority of the CASAC recommended adoption of an annual SO_2 standard with a level within the range of 10 to 15 ppb. These members indicated that this range of levels was generally associated with S deposition below 5 kg/ha-yr during the 2014–2016 and 2018–2020 trajectory analysis periods in the PA. The CASAC majority further conveyed that a standard level in this range (10–15 ppb) would afford protection to tree and lichen species as well as waterbodies, further stating that such a standard would ''preclude the possibility of returning to deleterious deposition values'' that these members indicated to be associated with relatively high annual average SO_2 concentrations observed in 2019–2021 near a location of industrial sources (Sheppard, Response to Charge Questions, pp. 24–25).

Thus, based on analyses and evaluations in the PA, including judgments related to uncertainties in relating ambient air concentrations to deposition estimates for the purpose of identifying a standard level associated with a desired level of ecological protection, and based on advice from the CASAC majority, the Administrator judges that a level within the range from 10 to 15 ppb would be appropriate for an annual average SO_2 standard requisite to protect the public welfare from adverse effects related to S deposition.

The Administrator also considered the extent to which a new annual average standard might be expected to control short-term concentrations (*e.g.,* of three hours duration) and accordingly provide protection from direct effects that is currently provided by the existing 3-hour secondary standard. In this context, he notes the analyses and conclusions of the PA with regard to the extent of control for short-term concentrations (*e.g.,* of three hours duration) that might be expected to be provided by an annual secondary SO_2 standard. These analyses indicate that in areas and periods when the annual SO_2 concentration (annual average, averaged over three years) is below 15 ppb, design values for the existing 3-hour standard are well below the existing secondary standard level of 0.5 ppm SO_2 (PA, Figure 2–29). Based on these findings of the PA, the Administrator proposes that it is appropriate to consider revision of the existing secondary SO_2 standard to an annual standard, with a 3-year average form and a level in the range from 10 to 15 ppb.

The Administrator also takes note of the recommendation from the CASAC minority to establish a 1-hour SO_2 secondary standard, identical to the primary standard, based on its observation that most of the S deposition estimates for the last 10 years are less than 5 kg/ha-yr and judgment that this indicates that the existing 1-hour primary SO_2 standard adequately protects against long-term annual S deposition-related effects. Accordingly, the CASAC minority recommended setting the secondary SO_2 standard equal to the current primary standard (section II.E.2 above; Sheppard, 2023, p. A–2). The Administrator preliminarily concludes, for the reasons discussed above, that an annual standard is a more appropriate form to address deposition-

[95] As recognized in section II.E.1 above, in relating atmospheric loading to individual monitor concentrations, the higher correlations of the EAQM-weighted than the EAQM-max likely reflect the weighting of concentrations across multiple upwind monitors, with the trajectory analysis providing one approach that relates contributions from individual monitor locations to deposition in receiving ecosystems (without explicitly addressing the multiple factors at play).

related effects, but he recognizes that greater weight could be given to the effectiveness of the existing 1-hour primary standard in controlling emissions and associated deposition. In light of these considerations, we solicit comment on this alternate option for revising the secondary SO_2 standard to be identical to the current primary SO_2 standard.

In summary, based on all of the considerations identified above, including the currently available evidence in the ISA, the quantitative and policy evaluations in the PA, and the advice from the CASAC, the Administrator proposes to revise the existing secondary SO_2 standard, to an annual average standard, with a 3-year average form and a level within the range from 10 to 15 ppb as requisite to protect the public welfare. The EPA solicits comment on a lower level for a new annual standard down to 5 ppb, as well as whether the existing 3-hour secondary standard should be retained, in addition to establishing a new annual SO_2 standard. Further, the EPA solicits comment on the option of revising the existing secondary SO_2 standard to be equal to the current primary standard in all respects.

The Administrator additionally considers the available information and the PA evaluations and conclusions regarding the PM standard and S deposition-related effects. In so doing, he takes note of the information indicating varying composition of $PM_{2.5}$ at sites across the U.S. (PA, section 2.4.3), with non-S containing compounds typically comprising more than 70% of the total annual $PM_{2.5}$ mass in the East and even more in the West. Further, he considers the PA findings of air quality analyses that indicate appreciable variation in associations, and generally low correlations, between S deposition and $PM_{2.5}$, as summarized in section II.B above (PA, sections 6.2.2.3 and 6.2.4.2). In addition, he takes note of the discussion above in support of his decision regarding a revised secondary SO_2 standard, including the atmospheric chemistry information which indicates the dependency of S deposition on airborne SO_X, as evidenced by the parallel trends of SO_2 emissions and S deposition. Based on all of these considerations, the Administrator judges that protection of sensitive ecosystems from S deposition is more effectively achieved through a revised SO_2 standard than a standard for PM, and a revised PM standard is not warranted to provide protection against the effects of S deposition.

Having reached his proposed decisions with regard to S deposition and SO_2 and PM, the Administrator now turns to consideration of the secondary standards for N oxides and PM with regard to the protection afforded from direct ecological effects and from ecological effects related to ecosystem N deposition. As described below, the Administrator proposes to retain the existing NO_2 and PM standards. In considering the secondary standard for oxides of N and protection from direct effects of N oxides in ambient air, the Administrator notes the evidence of welfare effects at the time this standard was established in 1971 indicated the direct effects of N oxides on vegetation, most particularly effects on foliar surfaces, and that the currently available information continues to document such effects, as summarized in section II.C.1.a above (ISA, Appendix 3, sections 3.3 and 3.4; PA, sections 4.1 and 5.4.2). With regard to NO_2 and NO, the evidence does not indicate effects associated with ambient air concentrations allowed by the existing standard, as summarized in section II.C.3.c above (PA, section 7.4). Accordingly, the Administrator concurs with the PA conclusion that the evidence related to the direct effects of the N oxides, NO_2 and NO, does not call into question the adequacy of protection provided by the existing standard. With regard to the N oxide, HNO_3, the PA provides additional evaluation in recognition of the evidence of effects associated with air concentrations and associated HNO_3 dry deposition on plant and lichen surfaces, and uncertainty as to the extent to which exposures associated with such effects may be allowed by the existing secondary NO_2 standard (PA sections 7.1.2 and 5.4.2, and Appendix 5B, section 5B.4). Consistent with the conclusion in the PA, the Administrator judges the limited evidence to lack a clear basis for concluding that such effects might have been elicited by air quality that met the secondary NO_2 standard. Thus, while the Administrator takes note of this discussion in the PA, he additionally recognizes the limitations of the evidence and associated uncertainties and judges them too great to provide support to a revised secondary NO_2 standard. In so doing, he additionally takes note of the unanimous view of the CASAC that the existing secondary NO_2 standard provides protection from direct effects of N oxides (section II.E.2 above).

The Administrator next turns to consideration of the larger information base of effects related to N deposition in ecosystems. In so doing, he recognizes the complexities and challenges associated with quantitative characterization of N enrichment-related effects in terrestrial or aquatic ecosystems across the U.S. that might be expected to occur due to specific rates of atmospheric deposition of N over prolonged periods, and the associated uncertainties (PA, section 7.2.3). These complexities and challenges are described further below. Some of the complexities associated with terrestrial deposition are similar to those for aquatic deposition, such as untangling the impacts of historic deposition from what might be expected from specific annual deposition rates absent that history, while other complexities related to available quantitative information and analyses differ. Further, with regard to many aquatic systems that receive N loading from sources other than atmospheric deposition, there is complexity to estimating the portion of N inputs, and associated contribution to effects, derived from atmospheric sources.

It is important to note first that, as a general matter, the Administrator finds there are substantially more significant limitations and uncertainties associated with the evidence base for ecosystem effects related to N deposition associated with N oxides and PM, and with the available air quality information related to the limited potential for control of N deposition in areas across the U.S., in light of the impacts of other pollutants (*i.e.,* NH_3) on N deposition. The first set of limitations and uncertainties relates to quantitative relationships between N deposition and ecosystem effects, based on which differing judgments may be made in decisions regarding protection of the public welfare. In the case of protection of the public welfare from adverse effects associated with nutrient enrichment, we additionally recognize the complexity associated with identification of appropriate protection objectives in the context of changing conditions in aquatic and terrestrial systems as recent deposition has declined from the historical rates of loading. The second set of limitations and uncertainties relates to relatively lower correlations in more recent time periods of air quality metrics for N oxides with N deposition in ecosystems and the variation in PM composition across the U.S., particularly that between the eastern and western U.S. This latter set of limitations is considered to relate to the emergence of NH_3, which is not a criteria pollutant, as a greater influence on N deposition than N oxides and PM over the more recent years. Further, this influence appears to

be exerted in areas with some of the highest N deposition estimates for those years.

Additionally, the Administrator recognizes additional complexities in risk management and policy judgments, including with regard to identifying risk management objectives, such as judging the requisite public welfare protection for an ecosystem stressor like N enrichment, for which as the CASAC recognized, in terrestrial systems, there are both ''benefits and disbenefits'' (Sheppard, 2023, p. 8). As noted by the CASAC, ''[b]enefits include fertilization of crops and trees and the potential for improved sequestration of carbon in soils and plant biomass'' (Sheppard, 2023, p. 8), which, as noted in the PA, also complicates conclusions regarding the extent to which some ecological effects may be judged adverse to the public welfare (PA, section 7.4). In aquatic systems, identification of appropriate public welfare protection objectives is further complicated by N contributions to these systems from multiple sources other than atmospheric deposition, as well as by the effects of historical deposition that have influenced the current status of soils, surface waters, associated biota, and ecosystem structure and function. For example, changes to ecosystems that have resulted from past, appreciably higher levels of atmospheric deposition have the potential to affect how the ecosystem responds to current, lower levels of deposition or to still further reduced N inputs in the future.

In turning to consideration of the evidence and air quality information related to N deposition, the Administrator takes note of the fact that ecosystem N deposition is influenced by air pollutants other than N oxides, particularly, NH_3, which is not a CAA criteria pollutant (PA, sections 6.1, 6.2.1 and 7.2.3.3). As described in the PA, the extent of this contribution varies appreciably across the U.S. and has increased during the past 20 years.

More specifically, while the PA historical trend analyses document the reductions in N deposition that correspond with reductions in emissions of N oxides, these analyses additionally document the increasing role of NH_3 in N deposition since approximately 2010 and the co-occurring tempering of total N deposition reductions, likely reflecting the countervailing pattern in contributions from NH_3. Further, the areas of highest N deposition appear to correspond to the areas with the greatest deposition of NH_3 (PA, Figure 7–8).[96] The Administrator concurs with the PA conclusion that this information complicates his consideration of the currently available information with regard to protection from N deposition-related effects that might be afforded by the secondary standard for N oxides; particularly when considering the information since 2010 (and in more localized areas prior to that). That is, while the information regarding recent rates of ecoregion N deposition may in some individual areas (particularly those for which reduced N, specifically NH_3, has a larger role) indicate rates greater than the range of values identified in the PA for consideration (*e.g.,* 7–12 kg/ha-yr based on the considerations in section 7.2.3 of the PA and the benchmark of 10 kg/ha-yr, as conveyed in the advice from the CASAC), the PA notes that the extent to which this occurrence relates to the existing NO_2 secondary standard is unclear. The lack of clarity is both because of uncertainties in relating ambient air NO_2 concentrations to rates of deposition, and because of the increasing contribution of NH_3 to N deposition.

The Administrator notes the PA finding that the temporal trend in ecoregion N deposition differs for ecoregions in which N deposition is driven by reduced N compared to those where reduced N comprises less of the total (*e.g.,* PA, Figures 7–6 and 7–7). The N deposition trends in the latter ecoregions, which include reductions in the upper part of the distribution of ecoregion medians across the full 20-year period, as well as lower N deposition in the second as compared to the first decade (corresponding to the decline in NO_2 emissions), appear to document the influence that NO_2 emissions and concentrations had during this period. However, the influence of N oxides appears to be low in areas of the U.S. where N deposition is currently the highest, and where NH_3 emissions have an influential role (PA, section 7.2.3.3). In light of the PA evaluations of N deposition and relative contribution from reduced and oxidized N compounds, the Administrator concurs with the PA conclusion that, based on the current air quality and deposition information and trends, a secondary standard for N oxides cannot be expected to effectively control total N deposition (PA, section 7.4).

The Administrator additionally considers the two sets of advice from the CASAC regarding an NO_2 annual standard in consideration of N deposition effects (section II.E.2 above). The CASAC majority recommended revision of the existing annual NO_2 standard level to a value ''<10 to 20 ppb'' (Sheppard, 2023, p. 24). As described in section II.E.2 above, however, the basis for this advice relates to a graph in the draft PA of the dataset of results from the trajectory-based analyses for the weighted annual NO_2 metric (annual NO_2 EAQM-weighted), which as noted above is not directly translatable to concentrations at individual monitors or to potential standard levels. These CASAC members additionally recognized that these results found no correlation between the ecoregion deposition and the EAQM-weighted values at upwind locations, and as described in section II.B above, the correlation coefficients are negative for N deposition with both annual NO_2 EAQMs (PA, Table 6–10). Accordingly, based on the lack of a correlation for N deposition with the EAQMs, as well as the lack of translatability of the EAQM-weighted values to monitor concentrations or standard levels, the PA did not find the information highlighted by the CASAC majority for relating N deposition levels to ambient air concentrations to provide scientific support for their recommended levels. In light of this, the Administrator does not agree with the CASAC majority recommendations on revisions to the annual NO_2 standard.

The minority CASAC member recommended revision of the secondary NO_2 standard to be identical to the primary standard based on their conclusion that the recent N deposition levels meet desired objectives and that the primary standard is currently the controlling standard (Sheppard, 2023, Appendix A). In consideration of this advice, the PA noted that among the NO_2 primary and secondary NAAQS, the 1-hour primary standard (established in 2010) may currently be the controlling standard for ambient air concentrations, and observed that annual average NO_2 concentrations, averaged over three years, in areas that meet the current 1-hour primary standard, have generally been below approximately 35 to 40 ppb.[97]

[96] This associated lessening influence of N oxides on total N deposition is also evidenced by the poor correlations between N deposition and annual average NO_2 concentrations (PA, sections 6.2.3 and 6.2.4), most particularly in more recent years and at eastern sites, which may be related to increasing emissions of NH_3 in more recent years and at eastern sites (PA, section 2.2.3 and Figure 6–5).

[97] The air quality information regarding annual average NO_2 concentrations at SLAMS monitors indicates more recent NO_2 concentrations are well below the existing standard level of 53 ppb. As noted in the PA, the temporal trend figures indicate that, subsequent to 2011–2012, when median N

In light of this finding, the PA identified a revision option for consideration based on the recent pattern in NO_2 concentrations (*i.e.,* revision to a level below the current level of 53 ppb to as low as 35 to 40 ppb [PA, section 7.4]).

In considering this option as identified in the PA, the Administrator takes note of the PA characterization of the support for this option as ''not strong'' (PA, section 7.4). He further notes the PA conclusion that while the option may have potential to provide some level of protection from N deposition related to N oxides, there is significant uncertainty as to the level of protection that would be provided. The Administrator notes that this uncertainty relates prominently to the influence of NH_3 on total N deposition separate from that of N oxides, and which in some areas of the U.S., particularly those areas where N deposition is highest, appears to be dominant (PA, section 7.2.3.3). Further, he gives weight to the PA statement that the extent to which the relative roles of these two pollutants (N oxides and NH_3) may change in the future is not known. As evaluated in the PA, these factors together affect the extent of support for, and contribute significant uncertainty to, a judgment as to a level of N oxides in ambient air that might be expected to provide requisite protection from N deposition-related effects on the public welfare.

In light of the considerations recognized above (summarized earlier in this section and in section II.E.1 above), the Administrator finds that the existing evidence does not clearly call into question the adequacy of the existing secondary NO_2 standard. In so doing, he additionally notes, as recognized in the PA above, that recent median N deposition estimates are below the N deposition benchmark identified by the CASAC majority of 10 kg/ha-yr in ecoregions for which approximately half or more of recent total N deposition is estimated to be oxidized N, driven by N oxides (PA, section 7.2.3.3). In addition to the substantial uncertainty described above regarding the need for control of N deposition from N oxides that might be provided by a secondary standard for N oxides, the Administrator also takes note of the PA finding that there is substantial uncertainty about the effect of a secondary standard for N-oxides on the control of N deposition such that it is also not clear whether the available information provides a sufficient basis for a revised standard that might be judged to provide the requisite protection. In light of this PA finding, the current information on air quality and N deposition, and all of the above considerations, the Administrator proposes to also judge that the available evidence in this review is sufficient to conclude a revision to the secondary annual NO_2 standard is not warranted. Based on all of these considerations, he proposes to retain the existing secondary NO_2 standard, without revision. The EPA solicits comments on this proposed decision, and also solicits comment on the alternative of revising the level and form of the existing secondary NO_2 standard to a level within the range from 35 to 40 ppb with a 3-year average form.

Lastly, the Administrator turns to consideration of the existing standards for PM. As an initial matter, he takes note of the PA discussion and conclusion that the available information does not call into question the adequacy of protection afforded by the secondary $PM_{2.5}$ standards from direct effects and deposition of pollutants other than S and N compounds (PA, sections 7.1.3 and 7.4). The evidence characterized in the ISA and summarized in the PA indicates such effects to be associated with conditions associated with concentrations much higher than the existing standards. Thus, the Administrator proposes to conclude that the current evidence does not call into question the adequacy of the existing PM standards with regard to direct effects and deposition of pollutants other than S and N compounds.

With regard to N deposition and $PM_{2.5}$, the Administrator considers the analyses and evaluations in the PA, as well as advice from the CASAC. As an initial matter, the Administrator takes note of the substantial and significant limitations and uncertainties associated with the evidence base for ecosystem effects related to N deposition associated with PM and with the available air quality information related to the limited potential for control of N deposition in areas across the U.S. in light of the impacts of NH_3 on N deposition, as summarized earlier. For example, he notes limitations and uncertainties that relate to relatively lower correlations in more recent time periods of air quality metrics with N deposition and the variation in PM composition across the U.S. For example, the air quality analyses of relationships found only low to barely moderate correlations between N deposition estimates and annual average $PM_{2.5}$ concentrations at nearby or upwind locations based on the full 20-year dataset, with somewhat higher correlations for the early years of the 20-year period, but with low or no correlation in the later years (PA, Chapter 6 and section 7.2.3.3). The PA also noted the variable composition of $PM_{2.5}$ across the U.S., which contributes to geographic variability in the relationship between N deposition and $PM_{2.5}$ concentrations, and that an appreciable percentage of $PM_{2.5}$ mass does not contribute to N deposition. For example, the highest percentage of $PM_{2.5}$ represented by N compounds at CSN sites in 2020–2022 is 30% and it is less than 10% at an appreciable of sites (PA, section 6.4.2). The PA notes that this variability in percentage of $PM_{2.5}$ represented by N (or S) containing pollutants contributes a high level of uncertainty to our understanding of the potential effect of a $PM_{2.5}$ standard on patterns of N deposition.

In considering the advice from the CASAC for revision of the existing annual $PM_{2.5}$ secondary standard, the Administrator notes the lack of consensus such that the Committee provided two different recommendations for revising the level of the standard, as summarized in section II.E.2 above: one for a level in the range from 6 to 10 $\mu g/m^3$ and the second for a level of 12 $\mu g/m^3$. As summarized in the PA, the specific rationale for the range from 6 to 10 ug/m^3 is unclear, with levels within this range described as both relating to N deposition in a preferred range (at or below 10 kg N/ha-yr) and relating to deposition above that range.[98] The PA noted that this ''overlap'' illustrates the weakness and variability of relationships of $PM_{2.5}$ with N deposition across the U.S. (PA, section 7.4). Further, the PA notes the low correlation for total N deposition estimates with annual average $PM_{2.5}$ design values in the last 10 years at SLAMS (PA, Table 6–7). The second recommendation, from the CASAC minority, was based on their conclusion that the recent N (and S) deposition levels meet desired targets and that the primary annual $PM_{2.5}$ standard, which has been 12 $\mu g/m^3$ since 2013, has been

deposition levels in 95% of the eastern ecoregions of the continental U.S. have generally been at or below 11 kg N/ha-yr, annual average NO_2 concentrations, averaged across three years, have been at or below 35 ppb (PA, section 7.2.3.3).

[98] For example, the justification provided for the range of levels recommended by the CASAC majority for a revised $PM_{2.5}$ annual standard (6 to 10 $\mu g/m^3$) refers both to annual average $PM_{2.5}$ concentrations (3-yr averages) ranging from 2 to 8 $\mu g/m^3$ in 27 Class I areas (as corresponding to N deposition estimates at or below 10 kg/ha-yr) and to annual average $PM_{2.5}$ concentrations (3-year averages) ranging from 6 to 12 $\mu g/m^3$ (at design value sites in areas of N deposition estimates greater than 15 kg/ha-yr), as summarized in section II.E.2 above.

the controlling standard for annual $PM_{2.5}$ concentrations (Sheppard, 2023, Appendix A).

Based on the currently available information, taking into account its limitations and associated uncertainties, and in consideration of all of the above, the Administrator proposes to conclude that $PM_{2.5}$ is not an appropriate indicator for a secondary standard intended to provide protection of the public welfare from adverse effects related to N deposition. In reaching this proposed conclusion, the Administrator focuses in particular on the weak correlation between annual average $PM_{2.5}$ design values and N deposition estimates in recent time periods, and additionally notes the PA conclusion that the available evidence, as evaluated in the PA, is reasonably judged insufficient to provide a basis for revising the $PM_{2.5}$ annual standard with regard to effects of N deposition related to PM. Thus, based on consideration of the PA analyses and conclusions, as well as consideration of advice from the CASAC, the Administrator proposes to conclude that no change to the annual secondary $PM_{2.5}$ standard is warranted and he proposes to retain the existing $PM_{2.5}$ secondary standard, without revision. The EPA solicits comment on this proposed decision. Additionally, while recognizing the information and judgments regarding uncertainties that lead him to this proposed decision, the Administrator recognizes that there may be alternate views with regard to whether and to what extent a secondary standard with a $PM_{2.5}$ indicator might be expected to provide control of N deposition. In this context, the Administrator additionally solicits comment on revising the existing standard level to a level of 12 $\mu g/m^3$, in light of the recommendation and associated rationale provided by the CASAC minority.

With regard to other PM standards, the Administrator concurs with the PA's finding of a lack of information that would call into question the adequacy of protection afforded by the existing PM_{10} secondary standard for ecological effects, and thus concludes it is appropriate to propose retaining this standard without revision. With regard to the 24-hour $PM_{2.5}$ standard, the Administrator takes note of the PA conclusion that the evidence available in this review, as documented in the ISA, or cited by the CASAC,[99] does not call into question the adequacy of protection provided by the 24-hour $PM_{2.5}$ standard from ecological effects (PA, section 7.4). Further, the Administrator considers the comments of the CASAC majority and recommendations for revision of this standard to a lower level or to an indicator of deciviews based on its consideration of short-term fog or cloud-related deposition events, without further specificity, as summarized in section II.E.2 above. In so doing, the Administrator notes the PA finding that, while the available evidence in the ISA recognizes there to be N deposition associated with cloud water or fog, it does not provide estimates of this deposition, describe associated temporal variability, or specify related effects on biota (ISA, Appendix 2; PA, section 7.3). Further, the specific revision options recommended by the CASAC majority were based on visibility considerations although the adequacy of protection provided by the secondary $PM_{2.5}$ standard from visibility effects has been addressed in the reconsideration of the 2020 p.m. NAAQS decision (89 FR 16202, March 6, 2024) and is not included in this review. The Administrator additionally notes the recommendation from the CASAC minority to retain the existing 24-hour secondary $PM_{2.5}$ standard without revision. Based on all of these considerations, the Administrator proposes to retain the existing 24-hour secondary $PM_{2.5}$ standard, without revision. Further, based on the lack of evidence calling into question the adequacy of the secondary PM_{10} standards, he also proposes to retain the secondary PM_{10} standards without revision.

In reaching the conclusions described above regarding protection of the public welfare from ecological effects associated with ecosystem deposition of N and S compounds, the Administrator also takes note of consideration in the PA of the potential for indicators different from those for the current standards that may target specific chemicals that deposit N and S, *e.g.,* NO_3^-, SO_4^{2-}, NH_4^+ (PA, sections 7.2.2.3, 7.2.3.3 and 7.4). In so doing, however, he recognizes a number of uncertainties and gaps in the available information important to such consideration. For example, one uncertainty relates to the depth of our understanding of the distribution of these chemicals in ambient air, including relationships between concentrations near sources and in areas of deposition, such as in protected areas. As described in the PA, depending on the indicator selected, the relationship exhibited between concentrations of the indicator and N or S deposition at the same location may not be expected to hold for concentrations of the indicator in more distant locations, including locations near emissions sources. Based on these considerations, the Administrator judges that the currently available information does not support standards based on such indicators at this time. Additionally, there are not currently approved regulatory monitoring methods for these potential indicators and there are practical considerations associated with establishing new standards with new indicators related to establishment of regulatory measurement methods and surveillance networks, that would impact effective implementation of the standards. Thus, he also recognizes that additional data collection and analysis is needed to develop the required evidence base to inform more comprehensive consideration of such alternatives.

F. Proposed Decision on the Secondary Standards

The Administrator proposes to revise the existing secondary SO_2 standard to be an annual average, averaged over three consecutive years with a level within the range from 10 to 15 ppb. The EPA solicits comments on this proposal, including the averaging time, form and range of levels for the revised standard. The EPA also solicits comments on the option of retaining the existing 3-hour standard, while also establishing such a new annual secondary standard. Additionally, the EPA solicits comment on the second option identified in the PA, for setting the level for a new annual standard in the range from 10 to 5 ppb, and also on the option of revising the secondary standard to be identical to the existing primary standard in all respects, along with the rationales on which such views are based.

The Administrator proposes to retain the existing secondary standards for N oxides, and the existing suite of secondary standards for PM. The EPA solicits comments on these proposed decisions. The EPA also solicits comment on revising the level and form of the existing secondary NO_2 standard to a level within the range from 40 to 35 ppb and a 3-year average form. Regarding the PM secondary standards, the Administrator also solicits comment on revising the level of the existing annual secondary $PM_{2.5}$ standard to 12 $\mu g/m^3$.

[99] As summarized in section II.E.2 above, the CASAC majority, in its recommendation for revision of the existing standard, did not provide specificity regarding the basis for its references to lichen species and fog or cloud water, and the available evidence as characterized in the ISA does not provide estimates of this deposition or describe associated temporal variability, or specifically describe related effects on biota (ISA, Appendix 2).

III. Interpretation of the Secondary SO_2 NAAQS

The EPA is proposing to revise appendix T to 40 CFR part 50, Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur, in order to provide data handling procedures for the proposed annual secondary SO_2 standard. The proposed § 50.21 which sets the averaging period, level, indicator, and form of the proposed annual standard refers to this appendix T. The proposed revised appendix T would detail the computations necessary for determining when the proposed annual secondary SO_2 NAAQS is met. The proposed revised appendix T also would address data reporting, data completeness considerations, and rounding conventions.

A. Background

The general purpose of a data interpretation appendix is to provide the practical details on how to make a comparison between multi-day and possibly multi-monitor ambient air concentration data and the level of the NAAQS, so that determinations of attainment and nonattainment are as objective as possible. Data interpretation guidelines also provide criteria for determining whether there are sufficient data to make a NAAQS level comparison at all. The regulatory language for the current secondary SO_2 NAAQS, originally adopted in 1971, does not contain detailed data interpretation instructions. This situation contrasts with the primary NO_2, ozone, $PM_{2.5}$, PM_{10}, lead, and primary SO_2 NAAQS regulations, for which there are detailed data interpretation appendices in 40 CFR part 50 addressing issues that can arise in comparing monitoring data to the NAAQS. The existing appendix T includes these detailed data interpretation requirements for the primary 1-hour SO_2 NAAQS, thus the proposed revision would provide similar information for the proposed annual secondary SO_2 NAAQS. The EPA has used its experience developing and applying this data interpretation appendix to develop the proposed revisions to the text in appendix T to address the proposed annual SO_2 standard.

B. Interpretation of the Secondary SO_2 Standard

The purpose of a data interpretation rule for the secondary SO_2 NAAQS is to give effect to the form, level, averaging time, and indicator specified in the proposed regulatory text at 40 CFR 50.21, anticipating and resolving in advance various future situations that could occur. The proposed revised appendix T provides definitions and requirements that apply to the proposed annual secondary standard for SO_2. The requirements clarify how ambient air data are to be reported, what ambient air data are to be used for comparisons with the SO_2 NAAQS, and how to calculate design values for comparisons with the SO_2 NAAQS. The data already required to be reported by ambient SO_2 monitors for use in calculating design values for the current primary 1-hour SO_2 NAAQS are also sufficient for use in calculating design values for the proposed secondary SO_2 NAAQS.

The proposed revised appendix T specifies that the annual secondary SO_2 NAAQS would be met at an ambient air quality monitoring site when the valid annual secondary standard design value is less than or equal to [10–15] ppb, depending on the level finalized. The annual secondary standard design value for an ambient air quality monitoring site is described as the mean of the annual means for three consecutive years, with the annual mean derived as the annual average of daily means, with rounding and data completeness specified as described below. The use of a daily mean value in deriving the design value is consistent with the existing data handling requirements for the current 1-hour primary SO_2 NAAQS.

Data completeness requirements for the proposed annual secondary standard in the proposed revised appendix T follows past EPA practice for other NAAQS pollutants by requiring that in general at least 75% of the monitoring data that should have resulted from following the planned monitoring schedule in a period must be available for the key air quality statistic from that period to be considered valid. These data completeness requirements are consistent with the current data completeness requirements for the 1-hour primary SO_2 NAAQS in appendix T, and this proposal would not change those requirements. For the proposed annual secondary SO_2 NAAQS, the key air quality statistics are the annual average of daily mean (24-hour average, midnight-to-midnight) concentrations in three successive years. It is important that daily means are representative of the 24-hour period and that all seasons of the year are well represented. Hence, the 75% requirement is proposed to be applied at the daily and quarterly levels. These completeness requirements, including the calculation of the daily mean, are consistent with existing completeness requirements for the current 1-hour primary SO_2 NAAQS. The EPA invites comment on the proposed completeness requirements in appendix T.

Recognizing that there may be years with incomplete data, the proposed text provides that a design value derived from incomplete data will nevertheless be considered valid if at least 75 percent of the days in each quarter of each of three consecutive years have at least one reported hourly value, and the 3-year annual average design value calculated according to the procedures specified in the proposed revised appendix T is above the level of the secondary annual standard. Additionally, following provisions in the proposed revised appendix T, a substitution test may be used to demonstrate validity of incomplete design values above the level of the standard by substituting a ''low'' daily mean value from the same calendar quarter in the 3-year design value period. Similarly, another substitution test may be used to demonstrate validity of incomplete design values below the level of the standard by substituting a ''high'' daily mean value from the same calendar quarter in the 3-year design value period. These substitution tests are consistent with existing substitution tests for the current 1-hour primary SO_2 NAAQS.

It should be noted that one possible outcome of applying the proposed substitution test is that a year with incomplete data may nevertheless be determined to not have a valid design value and thus to be unusable in making annual secondary NAAQS compliance determinations for that 3-year period. However, the intention of the proposed substitution test is to reduce the frequency of such occurrences. The EPA invites comment on incorporating the proposed substitution test into the final rule.

The EPA is proposing that the Administrator have general discretion to use incomplete data to calculate design values that would be treated as valid for comparison to the NAAQS despite the incompleteness, either at the request of a State or at the Administrator's own initiative. Similar provisions exist already for the $PM_{2.5}$, NO_2, lead, and 1-hour primary SO_2 NAAQS. The Administrator would consider monitoring site closures/moves, monitoring diligence, and nearby concentrations in determining whether to use such data.

Regarding rounding conventions for the annual secondary SO_2 NAAQS, the EPA is proposing to be consistent with rounding conventions used for the current 1-hour primary SO_2 NAAQS.

Specifically, the EPA proposes that hourly SO_2 measurement data shall be reported to EPA's regulatory database in units of ppb, to at most one place after the decimal, with additional digits to the right being truncated with no further rounding. Daily mean values and the annual mean of those daily values are not rounded. Further, the annual secondary standard design value is calculated pursuant to the proposed revised appendix T and then rounded to the nearest whole number or 1 ppb (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number). The EPA invites comment on the proposed rounding conventions.

IV. Ambient Air Monitoring Network for SO_2

One of the primary purposes of collecting ambient air SO_2 monitoring data is for use in determining whether ambient pollutant concentrations exceed the SO_2 NAAQS. Ambient air SO_2 monitoring data are collected by State, local, and Tribal monitoring agencies, as well as industry and the EPA in some instances, in accordance with the monitoring requirements contained in 40 CFR parts 50, 53, and 58. This section briefly discusses the current status of the SO_2 monitoring network, its adequacy in supporting the existing secondary SO_2 standard, and its support for the proposed revision to the secondary SO_2 NAAQS. Based on a thorough review of the SO_2 monitoring network, the EPA is not proposing any changes to the ambient air monitoring network design requirements.

Ambient air SO_2 monitoring data used for comparison to the NAAQS are typically collected by State, local, and Tribal monitoring agencies (''monitoring agencies''), as well as industry and Federal entities in some situations, in accordance with the monitoring requirements contained in 40 CFR parts 50, 53, and 58. A monitoring network is generally designed to measure and provide relevant air quality data as described and prescribed in 40 CFR part 58. To ensure that the data from the network are accurate and reliable to fulfill their intended purpose, the monitors in the network must comply with a set of requirements including the use of monitoring methods that EPA has designated as Federal Reference Methods (FRMs) or Federal Equivalent Methods (FEMs) per 40 CFR part 53, a network design to achieve monitoring objectives, and specific siting criteria, data reporting, quality assurance, and data handling rules or procedures.

When promulgating the existing short-term 1-hour daily maximum primary SO_2 NAAQS in 2010 (75 FR 35520, June 22, 2010), the EPA recognized that monitoring to support the health-based standard required a focus on measuring where SO_2 emissions were elevated and to address population exposure. To that end, the EPA finalized minimum monitoring requirements for ambient air SO_2 that prioritized monitoring resources in areas based on coincidence of elevated SO_2 emissions and population, locking in a significant portion of the existing network at that time as well as introducing new monitors to the network. This approach was based on a hybrid analytical approach that was explained in the preamble to the 2010 primary SO_2 NAAQS review that used both monitoring and modeling to assess compliance with the newly promulgated 1-hour standard.

In 2015, the EPA followed up on that hybrid monitoring and modeling concept to support the new 1-hour primary NAAQS by promulgating the Data Requirements Rule (DRR). The DRR (80 FR 51051, August 21, 2015) required air quality characterization in areas with large sources of SO_2 emissions, specifically taking measures to assess and address the lack of information on SO_2 concentrations around sources or source areas emitting 2,000 tons per year or more. Under the DRR, States had the option to employ monitoring, dispersion modeling, or to take a federally enforceable permit limit to comply. The implementation of the DRR resulted in approximately 78 monitoring sites across the country being focused on collecting data at locations of expected maximum SO_2 concentrations around sources.

There are approximately 434 ambient air SO_2 monitors currently reporting data to EPA nationwide, with at least one SO_2 monitor in every State, the District of Columbia, and Puerto Rico. The network reflects minimum monitoring requirements promulgated in the 2010 SO_2 Primary NAAQS revision, the requirement to measure SO_2 at all NCore multipollutant monitoring stations, actions taken by monitoring agencies to satisfy the DRR, plus additional monitoring conducted by State, local, and Tribal air agencies on their own prerogative to satisfy other data needs. In the memo in the docket for this action titled ''Ambient Air SO_2 Monitoring Network Review and Background'' (Watkins et al., 2024), it is indicated that the current SO_2 monitoring network includes a focus on characterizing air quality where SO_2 concentrations are expected to be high in the ambient air. The network provides data needed for implementation of the current primary and secondary SO_2 NAAQS and can also provide data that can be used to support the needs for an annual average standard like the one being proposed in this action.

Based on the EPA's review of the SO_2 network history, current design and objectives, and data, we believe that the current network is adequate to provide the data needed to implement the proposed secondary SO_2 NAAQS; therefore, modification to the existing SO_2 minimum monitoring requirements is not necessary. As noted in section II.B.1, spatial distribution of SO_2 and sulfate deposition reflect the distribution for SO_X emissions on which the network is largely focused upon. Additionally, as noted in section II.E.3, there is a general association of monitoring sites having higher SO_2 concentrations in areas with higher local sulfur deposition estimates, meaning that a network measuring SO_2 in areas of expected higher concentrations would be expected to capture SO_2 concentrations contributing to areas experiencing higher deposition. We therefore believe that modifications to the existing SO_2 minimum monitoring requirements are not necessary to support implementation of the standard proposed in this action. In further support of this position, the EPA notes that the network is and will continue to be adaptable and can evolve in response to changing data needs, even without the Agency making changes to minimum monitoring requirements. The State, local, and Tribal air agencies that operate most of the network monitors, as well as industry stakeholders, can propose and make adjustments to their pieces of the network when a new need arises, or air quality conditions change. Finally, the EPA has authority through 40 CFR part 58, appendix D, section 4.4.3, for its Regional Administrators to work with State, local, and Tribal air agencies to require SO_2 monitoring above the minimum monitoring requirements where the network is found to be insufficient to meet its objectives. This means that monitors can be added in an area that has the potential for concentrations that exceed or contribute to an exceedance of the level of the NAAQS.

In summary, the EPA is not proposing any changes to the minimum monitoring requirements as part of this proposal to revise the secondary SO_2 NAAQS because the network is currently adequate, and because the EPA, State, local, Tribal, and industry

stakeholders have the authority and ability to adjust monitoring efforts and redirect resources as needed to ensure that the monitoring objectives of the SO_2 network continue to be met. The EPA solicits comment on this proposed determination.

V. Clean Air Act Implementation Considerations for the Proposed Secondary SO_2 Standard

The proposed SO_2 secondary NAAQS, if finalized, would trigger a number of implementation processes which are discussed for informational purposes in this portion of the preamble. The Agency is proposing to retain the secondary NO_2 and PM NAAQS; thus, discussion of implementation considerations related to those NAAQS is not included in this section.

At the outset, promulgation of a new or revised NAAQS, including finalization of this proposed revision, would trigger a process through which States [100] would make recommendations to the Administrator regarding initial area designations. States also would be required to make a new SIP submission to establish that they meet the necessary structural requirements for such new or revised NAAQS pursuant to CAA section 110(a)(1) and (2), also referred to as the ''infrastructure SIP submission'' (more on this submission below). Further, if finalized, the SO_2 secondary NAAQS would need to be incorporated into the implementation of applicable air permitting requirements and SIP conformity processes. This section provides background information for understanding the possible implications of the proposed NAAQS changes and describes the EPA's intentions for providing States any guidance the EPA determines to be needed to assist their implementation efforts, if such proposed changes are finalized. This section also describes existing EPA interpretations of CAA requirements and other EPA guidance relevant to implementation of a new SO_2 secondary NAAQS, if one is finalized.

The EPA is not proposing any regulatory changes to SO_2 implementation as a part of this proposal. Therefore, EPA is not proposing action on such topics in this rulemaking. The public is encouraged to share information regarding implementation needs and considerations. Although this rulemaking is not requesting comment specifically on this topic, information on this topic may be submitted for informational purposes to the docket for this proposed rulemaking. The EPA welcomes the public to provide input to the Agency through comments. However, because these issues are not relevant to the establishment of the proposed secondary NAAQS, and because no specific revisions are proposed for the regulations implementing the proposed secondary NAAQS the EPA does not expect to respond to these comments in the final action on this proposal (nor is it required to do so).

A. Designation of Areas

After the EPA establishes a new or revised NAAQS (primary or secondary), the CAA requires the EPA and States to take steps to ensure that the new or revised NAAQS is met. The first step, known as the initial area designations, involves identifying areas of the country that either meet or do not meet the new or revised NAAQS, along with the nearby areas contributing to NAAQS violations.

Section 107(d)(1) of the CAA states that, ''By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, the Governor of each State shall . . . submit to the Administrator a list of all areas (or portions thereof) in the State'' and make recommendations for whether the EPA should designate those areas as ''nonattainment,'' ''attainment,'' or ''unclassifiable.'' [101] Section 107(d)(1)(A) of the CAA contains definitions of these terms. A nonattainment area is any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) a NAAQS; an attainment area is any area (other than an area identified as a nonattainment area) that meets a NAAQS; and an unclassifiable area is any area that cannot be classified on the basis of available information as meeting or not meeting a NAAQS. The CAA provides the EPA discretion to require states to submit their designations recommendations within a reasonable amount of time not exceeding 1 year. The CAA also stipulates that ''the Administrator may not require the Governor to submit the required list sooner than 120 days after promulgating a new or revised national ambient air quality standard.'' Section 107(d)(1)(B)(i) further provides, ''Upon promulgation or revision of a NAAQS, the Administrator shall promulgate the designations of all areas (or portions thereof) . . . as expeditiously as practicable, but in no case later than 2 years from the date of promulgation. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations.'' With respect to the NAAQS setting process, courts have interpreted the term ''promulgation'' to be signature and widespread dissemination of a final rule.[102]

If the EPA agrees that the state's designations recommendations are consistent with all relevant CAA requirements, then it may proceed to promulgate the designations for such areas. However, if the EPA disagrees that a state's recommendation is consistent with all relevant CAA requirements, then the EPA may make modifications to the recommended designations by following the process outlined in the CAA. By no later than 120 days prior to promulgating the final designations, the EPA is required to notify states of any intended modifications to the designations of any areas or portions thereof, including the boundaries of areas, as the EPA may deem necessary. States then have an opportunity to comment on the EPA's intended designations decisions. If a state elects not to provide designations recommendations, then the EPA must timely promulgate the designations that it deems appropriate. While section 107(d) of the CAA specifically addresses the designations process for states, the EPA intends to follow the same process for Tribes to the extent practicable, pursuant to section 301(d) of the CAA regarding Tribal authority, and the Tribal Authority Rule (63 FR 7254, February 12, 1998). To provide clarity and consistency in doing so, the EPA issued a guidance memorandum to our Regional Offices on working with Tribes during the designations process.[103]

In this action, the EPA is proposing to add an annual average SO_2 secondary standard with a level within the range of 10–15 ppb, averaged over three consecutive years. Consistent with the process used in previous area designations efforts for both primary

[100] This and all subsequent references to ''state'' are meant to include State, local and Tribal agencies responsible for the implementation of a SO_2 control program.

[101] While the CAA says ''designating'' with respect to the Governor's letter, in the full context of the CAA section it is clear that the Governor makes a recommendation to which the EPA must respond via a specified process if the EPA does not accept it.

[102] *API* v. *Costle,* 609 F.2d 20 (D.C. Cir. 1979).

[103] ''Guidance to Regions for Working with Tribes during the National Ambient Air Quality Standards (NAAQS) Designations Process,'' December 20, 2011, Memorandum from Stephen D. Page to Regional Air Directors, Regions 1–X available at *https://www.epa.gov/sites/default/files/2017-02/documents/12-20-11_guidance_to_regions_for_working_with_tribes_naaqs_designations.pdf.*

and secondary standards, the EPA will employ a nationally consistent framework and approach to evaluate each state's designations recommendations, considering air quality and other area-specific facts and circumstances [104] to support area designations and boundaries decisions for the NAAQS. Section 107(d) of the CAA explicitly requires that the EPA designate as nonattainment not only the area that is violating the pertinent standard, but also those nearby areas that contribute to ambient air quality in the violating area. Consistent with past practice, the EPA plans to address issues relevant to area designations more fully in a separate designations-specific memorandum around the time of promulgation of a new SO_2 secondary NAAQS, if the proposal to establish a new standard is finalized. As this section is designed for informational purposes, the public may comment on the process and schedule for the initial area designations and nonattainment boundary setting effort associated with the proposed new SO_2 secondary NAAQS. However, the EPA does not expect to respond to these comments in the final action containing the final decision on the proposed NAAQS (nor is it required to do so).

As in past iterations of establishing a new or revised NAAQS, the EPA intends to make the designations for any new or revised NAAQS based on the most recent 3 years of complete, certified, and valid air quality data and other available information. The EPA intends to use such available air quality data from the current SO_2 monitoring network and other technical information. Monitoring data are currently available from existing FEM and FRM monitors sited and operated in accordance with 40 CFR parts 50 and 58 to determine compliance with the proposed new SO_2 secondary NAAQS, if finalized.

In some areas, State or Tribal air agencies may flag air quality data for certain days in the Air Quality System (AQS) database due to potential impacts from exceptional events (*e.g.,* volcanic activity for SO_2). Air quality monitoring data affected by exceptional events may be excluded from use in identifying a violation at a regulatory ambient air monitoring site if the data meet the criteria for exclusion under EPA's ''Treatment of Data Influenced by Exceptional Events'' Final Rule (81 FR 68216; October 3, 2016) (Exceptional Events Rule) and codified at 40 CFR 50.1, 50.14, and 51.930. For events affecting initial area designations, including designations under the proposed annual SO_2 secondary NAAQS, if finalized, the air agency is required to follow the exceptional events demonstration submission deadlines that are identified in table 2 to 40 CFR 50.14(c)(2)(vi)—''Schedule for Initial Notification and Demonstration Submission for Data Influenced by Exceptional Events for Use in Initial Area Designations.'' The EPA encourages air agencies to work collaboratively with the appropriate EPA Regional office after identifying any exceptional event influencing ambient air quality concentrations in a way that could affect area designations for the proposed annual SO_2 secondary NAAQS, if finalized.[105]

B. Section 110(a)(1) and (2) Infrastructure SIP Requirements

The CAA directs states to address basic SIP requirements to implement, maintain, and enforce the NAAQS. Under CAA sections 110(a)(1) and (2), states are required to have state implementation plans that provide the necessary air quality management infrastructure including, among other things, enforceable emissions limitations, an ambient air monitoring program, an enforcement program, air quality modeling capabilities, and adequate personnel, resources, and legal authority. After the EPA promulgates a new or revised NAAQS, states are required to make a new SIP submission to establish that they meet the necessary structural requirements for such new or revised NAAQS or make changes to do so. The EPA refers to this type of SIP submission as an ''infrastructure SIP submission.'' Under CAA sections 110(a)(1), all states are required to make these infrastructure SIP submissions within 3 years after promulgation of a new or revised standard, or such shorter deadline as the EPA may impose. Although the CAA authorizes the EPA to set a shorter time for states to make these SIP submissions, the EPA is not proposing to do so. Section 110(b) of the CAA also provides that the EPA may extend the deadline for the ''infrastructure'' SIP submission for a new secondary NAAQS by up to 18 months beyond the initial 3 years. If the proposed new annual SO_2 secondary NAAQS is finalized, the EPA believes it would be more efficient for states and the EPA if each affected state submits the section 110 infrastructure SIP that addresses the secondary standard within 3 years of promulgation of a new or revised NAAQS, and so is not proposing to apply a shorter deadline. However, the EPA also recognizes that individual states may prefer the flexibility to submit the secondary NAAQS infrastructure SIP at a later date, and if requested, the EPA would review such requests on a case-by-case basis as is provided by the EPA's existing regulations implementing CAA section 110(b) at 40 CFR 51.341.

Under CAA section 110(a)(1) and (2), states are required to make SIP submissions that address a number of requirements pertaining to implementation, maintenance, and enforcement of a new or revised NAAQS. The specific subsections in CAA section 110(a)(2) require states to address a number of requirements, as applicable: (A) emissions limits and other control measures; (B) ambient air quality monitoring/data system; (C) programs for enforcement of control measures and for construction or modification of stationary sources; (D)(i) interstate pollution transport and (ii) interstate and international pollution abatement; (E) adequate resources and authority, conflict of interest, and oversight of local governments and regional agencies; (F) stationary source monitoring and reporting; (G) emergency episodes; (H) SIP revisions; (I) plan revisions for nonattainment areas; (J) consultation with government officials, public notification, Prevention of Significant Deterioration (PSD) and visibility protection; (K) air quality modeling and submission of modeling data; (L) permitting fees; and (M) consultation and participation by affected local entities. These requirements apply to all SIP submissions in general, but the EPA has provided specific guidance to states concerning its interpretation of these requirements in the specific context of infrastructure SIP submissions for a new or revised NAAQS.[106]

The EPA interprets the CAA such that two elements identified in section 110(a)(2) are not subject to the 3-year

[104] The EPA has historically used nationally consistent area-specific analyses to support nonattainment area boundary recommendations and final boundary determinations by evaluating factors such as air quality data, emissions and emissions-related data (*e.g.,* population density and degree of urbanization, traffic and commuting patterns), meteorology, geography/topography, and jurisdictional boundaries. We expect to follow a similar process when establishing area designations for any new or revised SO_2 secondary NAAQS, if finalized.

[105] Additional information, tools, and resources relating to exceptional events can be found at the EPA's exceptional events website located at *https://www.epa.gov/air-quality-analysis/final-2016-exceptional-events-rule-supporting-guidance-documents-updated-faqs.*

[106] *See* ''Guidance on Infrastructure State Implementation Plan (SIP) Elements under Clean Air Act sections 110(a)(1) and 110(a)(2)'' September 2013, Memorandum from Stephen D. Page to Regional Air Directors, Regions 1–10.

submission deadline of section 110(a)(1), and thus states are not required to address them in the context of an infrastructure SIP submission. The elements pertain to part D, in title I of the CAA, which addresses plan requirements for nonattainment areas. Therefore, for the reasons explained below, the following section 110(a)(2) elements are considered by the EPA to be outside the scope of infrastructure SIP actions: (1) the portion of section 110(a)(2)(C), programs for enforcement of control measures and for construction or modification of stationary sources that applies to permit programs applicable in designated nonattainment areas, (known as ''nonattainment new source review'') under part D; and (2) section 110(a)(2)(I) in its entirety. The EPA does not expect states to address these two elements pertaining to part D for a new or revised NAAQS in the infrastructure SIP submissions to include regulations or emissions limits developed specifically for attaining the relevant standard as it pertains to areas designated nonattainment for the proposed SO_2 secondary NAAQS, if finalized. States would be required to submit infrastructure SIP submissions for the proposed new SO_2 secondary NAAQS, if finalized, before they are required to submit nonattainment plan SIP submissions to demonstrate attainment with the same NAAQS. As a general matter, states would be required to submit nonattainment plans to provide for attainment and maintenance of the proposed new SO_2 secondary NAAQS, if finalized, within 3 years from the effective date of nonattainment area designations as required under CAA section 172(b). In addition, because this NAAQS, if finalized, would be a secondary standard, section 110(b) of the CAA also provides that the EPA may extend the deadline for the nonattainment plan for up to 18 months beyond the initial 3 years. The EPA reviews and acts upon these later SIP submissions through a separate process. For this reason, the EPA does not expect states to address new nonattainment area emissions controls per section 110(a)(2)(I) in their infrastructure SIP submissions.

Another required infrastructure SIP element is that each state's SIP must contain adequate provisions to prohibit, consistent with the provisions of title I of the CAA, emissions from within the state that will significantly contribute to nonattainment in, or interfere with maintenance by, any other state of the primary or secondary NAAQS.[107] This element is often referred to as the ''good neighbor'' or ''interstate transport'' provision.[108] The provision has two prongs: significant contribution to nonattainment (prong 1) and interference with maintenance (prong 2). The EPA and states must give independent significance to prong 1 and prong 2 when evaluating downwind air quality problems under CAA section 110(a)(2)(D)(i)(I).[109] Further, case law has established that the EPA and states must implement requirements to meet interstate transport obligations in alignment with the applicable statutory attainment schedule of the downwind areas impacted by upwind-state emissions.[110]

The EPA anticipates coordinating with states with respect to the requirements of CAA section 110(a)(2)(D)(i)(I) for implementation of the proposed SO_2 secondary NAAQS, if finalized. We note that states may elect to make SIP submissions that address certain infrastructure SIP elements separately from the others. In recent years, due in part to the complexity of addressing interstate transport obligations, some states have found it efficient to make SIP submissions to address the interstate transport provisions separately from other infrastructure SIP elements.

It is the responsibility of each state to review its air quality management program's existing SIP provisions in light of each new or revised NAAQS to determine whether any revisions are necessary to implement a new or revised NAAQS. Most states have revised and updated their SIPs in recent years to address requirements associated with other revised NAAQS. For some states, it may be the case that, for a number of infrastructure elements, the state may believe it already has adequate state regulations adopted and approved into the SIP to address a particular requirement with respect to any new or revised NAAQS. For such portions of the state's infrastructure SIP submission, the state could provide an explanation of how its existing SIP provisions are adequate.

If a state determines that existing SIP-approved provisions are adequate in light of the proposed SO_2 secondary NAAQS, if finalized, with respect to a given infrastructure SIP element (or sub-element), then the state could make a SIP submission ''certifying'' that the existing SIP contains provisions that address those requirements of the specific section 110(a)(2) infrastructure elements.[111] In the case of such a certification submission, the state would not have to include a copy of the relevant provision (*e.g.,* rule or statute) itself. Rather, the state in its infrastructure SIP submission could provide citations to the SIP-approved state statutes, regulations, or non-regulatory measures, as appropriate, which meet the relevant CAA requirement. Like any other SIP submission, that state could make such a certification only after it has provided reasonable notice and opportunity for public hearing. This ''reasonable notice and opportunity for public hearing'' requirement for infrastructure SIP submissions is to meet the requirements of CAA sections 110(a) and 110(l). Under the EPA's regulations at 40 CFR part 51, if a public hearing is held, an infrastructure SIP submittal must include a certification by the state that the public hearing was held in accordance with the EPA's procedural requirements for public hearings. See 40 CFR part 51, appendix V, 2.1(g), and see 40 CFR 51.102.

In consultation with its EPA Regional Office, a state should follow all applicable EPA regulations governing infrastructure SIP submissions in 40 CFR part 51—*e.g.,* subpart I (Review of New Sources and Modifications), subpart J (Ambient Air Quality Surveillance), subpart K (Source Surveillance), subpart L (Legal Authority), subpart M (Intergovernmental Consultation), subpart O (Miscellaneous Plan Content Requirements), subpart P (Protection of Visibility), and subpart Q (Reports). For the EPA's general criteria for infrastructure SIP submissions, refer to 40 CFR part 51, appendix V, Criteria for Determining the Completeness of Plan Submissions. The EPA recommends that states electronically submit their infrastructure SIPs to the EPA through the State Plan Electronic Collaboration System (SPeCS),[112] an online system available through the EPA's Central Data Exchange.

C. Prevention of Significant Deterioration and Nonattainment New Source Review Programs for the Proposed Secondary SO_2 Standard

The CAA, at parts C and D of title I, contains preconstruction review and

[107] CAA section 110(a)(2)(D)(i)(I)

[108] CAA section 110(a)(2)(D)(i)(II) also addresses certain interstate effects that states must address and thus is also sometimes referred to as relating to ''interstate transport.''

[109] *See North Carolina* v. *EPA,* 531 F.3d 896, 909–11 (D.C. Cir. 2008).

[110] *See id.* at 911–13. *See also Wisconsin* v. *EPA,* 938 F.3d 303, 313–20 (D.C. Cir. 2019); *Maryland* v. *EPA,* 958 F.3d 1185, 1203–04 (D.C. Cir. 2020).

[111] A ''certification'' approach would not be appropriate for the interstate pollution control requirements of CAA section 110(a)(2)(D)(i).

[112] *https://cdx.epa.gov/.*

permitting programs applicable to new major stationary sources and major modifications of existing major sources. The preconstruction review of each new major stationary source and major modification applies on a pollutant-specific basis, and the requirements that apply for each pollutant depend on whether the area in which the source is situated is designated as attainment (or unclassifiable) or nonattainment for that pollutant. In areas designated attainment or unclassifiable for a pollutant, the PSD requirements under part C apply to construction at major sources. In areas designated nonattainment for a pollutant, the Nonattainment New Source Review (NNSR) requirements under part D apply to major source construction. Collectively, those two sets of permit requirements are commonly referred to as the ''major New Source Review'' or ''major NSR'' programs.

The EPA is not proposing any changes to the NSR program regulations as part of this proposal to implement the proposed SO_2 secondary NAAQS, if finalized. Under the PSD program, at the effective date of a final new or revised NAAQS, the applicant must demonstrate that any new construction or major modification and associated source emissions increase triggering PSD requirements does not cause or contribute to violation of that new or revised NAAQS. The EPA has models, guidance, and other tools for making this showing. The EPA anticipates that sources and reviewing authorities will be able to use most of these existing tools to demonstrate compliance with the secondary SO_2 standard, if finalized as proposed. However, some adjustment and updates to these tools may be appropriate. The EPA is also considering an alternative compliance demonstration approach (described in section V.D. of this action) that the Agency may support using to make this PSD permitting demonstration. Considering these topics, the EPA has developed a separate technical document (Tillerson et al., 2024),[113] which provides a technical justification for how a demonstration of compliance with the 1-hour primary SO_2 standard can suffice to demonstrate compliance with the proposed new SO_2 secondary standard, if such a standard is finalized.

The statutory requirements for a PSD permit program set forth under part C of title I of the CAA (sections 160 through 169) are implemented through the EPA's PSD regulations found at 40 CFR 51.166 (minimum requirements for an approvable PSD SIP) and 40 CFR 52.21 (PSD permitting program for permits issued under the EPA's Federal permitting authority). Whenever a proposed new major source or major modification triggers PSD requirements for SO_2, either 40 CFR 52.21 or state regulations based on 40 CFR 51.166 will apply for undesignated areas and for areas that are designated as attainment or as unclassifiable for the proposed SO_2 secondary NAAQS, if such standard is finalized.

For PSD, a ''major stationary source'' is one with the potential to emit 250 tons per year (tpy) or more of any regulated NSR pollutant, unless the new or modified source is classified under a list of 28 source categories contained in the statutory definition of ''major emitting facility'' in section 169(1) of the CAA. For those 28 source categories, a ''major stationary source'' is one with the potential to emit 100 tpy or more of any regulated NSR pollutant. A ''major modification'' is a physical change or a change in the method of operation of an existing major stationary source that results, first, in a significant emissions increase of a regulated NSR pollutant and, second, in a significant net emissions increase of that pollutant. *See* 40 CFR 51.166(b)(2)(i), 52.21(b)(2)(i). The EPA PSD regulations define the term ''regulated NSR pollutant'' to include any pollutant for which a NAAQS has been promulgated and any pollutant identified in the EPA regulations as a constituent or precursor to such pollutant. *See* 40 CFR 51.166(b)(49), 52.21(b)(50). Thus, the PSD program currently requires the review and control of emissions of SO_2, as applicable. Among other things, for each regulated NSR pollutant emitted or increased in a significant amount, the PSD program requires a new major stationary source or a major modification to apply the ''best available control technology'' (BACT) and to conduct an air quality impact analysis to demonstrate that the proposed major stationary source or major modification will not cause or contribute to a violation of any NAAQS or PSD increment.[114] *See* CAA section 165(a)(3)–(4), 40 CFR 51.166(j) and (k), 52.21(j) and (k). The PSD requirements may also include, in appropriate cases, an analysis of potential adverse impacts on Class I areas. *See* CAA section 162(a) and 165, 40 CFR 51.166(p), 52.21(p)).[115]

With regard to nonattainment NSR, the EPA's regulations for the NNSR programs are contained in 40 CFR 51.165, 52.24 and 40 CFR part 51, appendix S. Specifically, the EPA developed minimum program requirements for a NNSR program that is approvable in a SIP, and those requirements, which include requirements for SO_2, are contained in 40 CFR 51.165. In addition, 40 CFR part 51, appendix S contains requirements constituting an interim NNSR program. This program enables NNSR permitting in nonattainment areas by states that lack a SIP-approved NNSR permitting program (or a program that does not apply to the relevant pollutant) during the time between the date of the relevant designation and the date that the EPA approves into the SIP a NNSR program. *See* 40 CFR part 51, appendix S, part I; 40 CFR 52.24(k). Any new NNSR requirements for SO_2 associated with the proposed secondary standard, should it be finalized, would not become applicable until the effective date of any nonattainment designation for the final standard.

As noted above, the EPA intends to review and consider the appropriateness of existing PSD compliance demonstration tools for implementation of any new secondary SO_2 NAAQS. In addition, as described below and in section V.D. of this document, the EPA acknowledges that there may be added burdens associated with making the required PSD air quality impact demonstration for the annual secondary standard if finalized, and the EPA may develop an alternative compliance demonstration based upon Tillerson et al. (2024) if the secondary SO_2 NAAQS is finalized as proposed. Under such an alternative compliance demonstration, sources and reviewing authorities would be able to sufficiently demonstrate compliance with the proposed new SO_2 secondary standard by demonstrating compliance with the primary 1-hour standard. Section V.D.

[113] This technical memo (Tillerson et al., 2024) is available in the docket for this NAAQS review (EPA–HQ–OAR–2014–0128).

[114] By establishing the maximum allowable level of ambient air pollutant concentration increase in a particular area, an increment defines ''significant deterioration'' of air quality in that area. Increments are defined by the CAA as maximum allowable increases in ambient air concentrations above a baseline concentration and are specified in the PSD regulations by pollutant and area classification (Class I, II and III). 40 CFR 51.166(c), 52.21(c); 75 FR 64864; October 20, 2010; The EPA has developed the Guideline on Air Quality Models and other documents to, among other things, provide methods and guidance for demonstrating compliance the NAAQS and PSD increments including the annual SO_2 standard. *See* 40 CFR part 51, appendix W; 82 FR 5182, January 17, 2017.

[115] Congress established certain Class I areas in section 162(a) of the CAA, including international parks, national wilderness areas, and national parks that meet certain criteria. Such Class I areas, known as mandatory Federal Class I areas, are afforded special protection under the CAA. In addition, states and Tribal governments may establish Class I areas within their own political jurisdictions to provide similar special air quality protection.

of this document includes further discussion of an alternative compliance demonstration approach and the technical justification that sources and permitting authorities may apply in permitting actions.

D. Alternative PSD Compliance Demonstration Approach for the Proposed Secondary SO_2 Standard

If the new secondary SO_2 NAAQS is finalized as proposed, the EPA would plan to calculate design values for the new secondary NAAQS using the procedures described in section III of this preamble, relying upon ambient air SO_2 measurement data. The PSD program requires that new or modified stationary sources complete a compliance demonstration using air quality modeling or other methods to demonstrate that their proposed emissions increases will not cause or contribute to a violation of any NAAQS, including this secondary SO_2 NAAQS, if finalized. *See* 40 CFR 51.166(k), (m), 52.21(k), (m). Under 40 CFR 51.166(l), 52.21(l), all PSD demonstrations for purposes of determining whether a new or modified source will cause or contribute to a NAAQS violation, including a violation of the secondary NAAQS for SO_2, if finalized, must be based upon air quality models, databases, and other requirements specified 40 CFR part 51, appendix W.

Under section 9.2.3 of appendix W, the EPA recommends a multi-stage approach to making the required demonstration of compliance with the NAAQS, which enables a streamlined demonstration in many cases using PSD screening tools. If a cumulative impact assessment is necessary, due to the source-oriented nature of the current monitoring network for SO_2, there is some uncertainty as to whether sources may be able to rely on existing monitoring data to adequately represent background for their PSD compliance demonstrations. Although the current SO_2 monitoring network is primarily geared to measure in areas of high SO_2 emissions proximate to populations and to sources, it has a limited number of monitors away from emissions areas that are needed to provide the information necessary for area specific estimates of background concentrations. Therefore, there may be situations where prospective PSD sources could be required to collect new data in order to determine the representative background concentrations of annual SO_2.

Because of the added burdens that may result for applicants and permitting authorities from these considerations, the EPA is considering alternative approaches to enable prospective PSD sources to more readily demonstrate that they will not cause or contribute to a violation of the proposed secondary SO_2 NAAQS, if finalized as proposed. The EPA believes that it is reasonable to allow the use of an alternative demonstration approach where such an approach is technically justified. The EPA is providing notice of the potential for an alternative PSD compliance demonstration approach discussed in this section and based upon the technical analysis detailed in Tillerson et al. (2024) included in the docket. The public is encouraged to share information on this alternative compliance demonstration approach. The EPA may consider information provided by the public in developing any future guidance on this approach for the new secondary SO_2 NAAQS. The EPA is not proposing this alternative compliance demonstration approach for the proposed secondary standard nor is the EPA taking any action to implement this alternative compliance demonstration approach in this rulemaking. Consequently, the EPA would not be obligated to respond to any comments received on this topic as part of the final rulemaking.

The Agency believes that following an alternative compliance demonstration approach could aid implementation of the PSD permitting program after enactment of the proposed secondary SO_2 NAAQS, if finalized. To support consideration of alternative approaches that could be used by prospective PSD sources, the EPA conducted a two-pronged technical analysis of the relationships between the proposed secondary standard and the existing 1-hour SO_2 primary NAAQS (*See* Tillerson et al., 2024). The first prong of the analysis addressed aspects of a PSD source impact analysis by evaluating whether an individual source's impact resulting in a small increase in 1-hour SO_2 concentration, at the level of the significant impact level (SIL) for the primary SO_2 NAAQS, would produce a comparably small increase in the annual SO_2 concentration. This analysis included modeled estimates of SO_2 for a range of source categories and scenarios. It indicated that small increases in 1-hour SO_2 concentrations caused by individual sources produce similarly small changes in the annual SO_2 concentrations. The second prong of the analysis addressed aspects of a PSD cumulative impact analysis indicating that a demonstration showing attainment of the 1-hour SO_2 standard is expected to also show attainment of the proposed secondary SO_2 standard. This analysis was based on 2017 to 2022 air quality data and compared the air quality that would meet the current 1-hour SO_2 standard (with its level of 75 ppb in conjunction with a 99th percentile averaged over 3 years) with air quality that would meet the proposed secondary SO_2 standard (with a level of 10–15 ppb in conjunction with an annual mean averaged over three years). As shown in Tillerson et al. (2024), this analysis indicated that all areas for which existing monitoring data showed attainment of the 1-hour SO_2 standards would also likely be in attainment of the proposed secondary SO_2 standard. The EPA believes that this technical analysis is robust and that its conclusions can be applied across the United States.

Based on this technical analysis, the EPA currently believes that there is sufficient evidence that, for the purposes of making a demonstration under the PSD program that a new or modified source will not cause or contribute to a violation of the proposed secondary SO_2 NAAQS, if finalized, a persuasive demonstration that the source will not cause or contribute to a violation of the 1-hour SO_2 NAAQS could serve as a suitable alternate compliance demonstration. As such, many or all sources undergoing PSD review for SO_2 would be able to rely upon their analysis demonstrating that they will not cause or contribute to a violation of the 1-hour SO_2 NAAQS to also demonstrate that they will not cause or contribute to a violation of the proposed secondary SO_2 NAAQS, if finalized. This alternative compliance demonstration approach would thus serve to streamline air quality analyses in a manner consistent with the CAA and NSR regulations. Using this approach would result in a source not needing to provide a separate and distinct analysis to demonstrate compliance with the proposed secondary SO_2 standard, if finalized. The EPA believes this alternative compliance demonstration approach could fulfill PSD requirements for individual sources in PSD areas for the proposed secondary SO_2 NAAQS, if finalized. This approach would apply in both areas that would not yet have been designated as nonattainment for the new secondary SO_2 NAAQS, if finalized, and those that would be ultimately designated as attainment or unclassifiable areas. The EPA will continue to evaluate this potential approach and may consider it in guidance addressing implementation of the proposed secondary SO_2 NAAQS, if

finalized, separate from this rulemaking setting the standard itself.

E. Transportation Conformity Program

Transportation conformity is required under CAA section 176(c) (42 U.S.C. 7506(c)) to ensure that federally supported highway and transit activities are consistent with (''conform to'') the purpose of the SIP. Transportation conformity applies to areas that are designated as nonattainment areas and to nonattainment areas that have been redesignated to attainment with an approved CAA section 175A maintenance plan (*i.e.,* maintenance areas) for transportation-related criteria pollutants: carbon monoxide, ozone, NO_2, $PM_{2.5}$, and PM_{10}. Motor vehicles are not significant sources of SO_2, and thus transportation conformity does not apply to any SO_2 NAAQS (40 CFR 93.102(b)(1)), existing or proposed.[116] Therefore, the EPA is not proposing any changes to the transportation conformity rule (40 CFR 51.390 and 40 CFR part 93, subpart A) for the proposed SO_2 secondary NAAQS.

F. General Conformity Program

The General Conformity program requirements at 40 CFR part 93, subpart B establish criteria and procedures for determining conformity as required under CAA section 176(c),[117] which prohibits a Federal agency from taking an action that would interfere with the ability of a state or Tribe to attain or maintain the NAAQS. General Conformity applies only to Federal activities not defined as transportation plans, programs, or projects under 40 CFR 93.102. The program requirements apply to emissions of all six criteria pollutants and their precursors per 40 CFR 93.153(b)(1) and (2), but only to the extent the emissions can be characterized as ''direct emissions'' or ''indirect emissions'' as defined under 40 CFR 93.152.

The General Conformity program applies to activities that cause emissions of the criteria or precursor pollutants to originate within designated nonattainment areas [118] or redesignated attainment areas that operate under approved CAA section 175A maintenance plans (*i.e.,* maintenance areas).

The EPA is not proposing changes to the General Conformity regulations in this proposed rulemaking. However, in the future, the EPA intends to review the need to issue or revise guidance describing how the current conformity regulations apply in nonattainment and maintenance areas for any new or revised NAAQS, as needed.

VI. Statutory and Executive Order Reviews

Additional information about these statutes and Executive orders can be found at *https://www.epa.gov/laws-regulations/laws-and-executive-orders.*

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review

This action is a ''significant regulatory action'' as defined in Executive Order 12866, as amended by Executive Order 14094. Accordingly, EPA submitted this action to the Office of Management and Budget (OMB) for Executive Order 12866 review. Documentation of any changes made in response to the Executive Order 12866 review is available in the docket. The EPA prepared an analysis to determine if additional emission reductions would be needed to meet the proposed revision of the secondary SO_2 NAAQS. This analysis is contained in the document ''Air Quality Analyses Using Sulfur Dioxide (SO_2) Air Quality Data,'' which is available in the docket for this NAAQS review (ID No. EPA–HQ–OAR–2014–0128). The analysis concluded that no additional emissions reductions beyond any needed to meet the current 1-hour primary SO_2 NAAQS would be expected to be necessary to meet the proposed annual secondary SO_2 NAAQS, resulting in no costs or benefits associated with pollution controls for this proposed NAAQS revision, if finalized. Accordingly, no regulatory impact analysis has been prepared for this proposal.

B. Paperwork Reduction Act (PRA)

This action does not impose an information collection burden under the PRA. There are no information collection requirements directly associated with a proposed decision to revise or retain a NAAQS under section 109 of the CAA.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. Rather, this proposed rule establishes national standards for allowable annual average concentrations of SO_2 in ambient air as required by section 109 of the CAA. See also *American Trucking Associations* v. *EPA,* 175 F.3d 1027, 1044–45 (D.C. Cir. 1999) (NAAQS do not have significant impacts upon small entities because NAAQS themselves impose no regulations upon small entities), rev'd in part on other grounds, *Whitman* v. *American Trucking Associations,* 531 U.S. 457 (2001).

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in the Unfunded Mandates Reform Act (UMRA), 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. Furthermore, as indicated previously, in setting a NAAQS the EPA cannot consider the economic or technological feasibility of attaining ambient air quality standards, although such factors may be considered to a degree in the development of state plans to implement the standards. See also *American Trucking Associations* v. *EPA,* 175 F. 3d at 1043 (noting that because the EPA is precluded from considering costs of implementation in establishing NAAQS, preparation of the RIA pursuant to the Unfunded Mandates Reform Act would not furnish any information that the court could consider in reviewing the NAAQS).

The EPA acknowledges, however, that if corresponding revisions to associated SIP requirements and air quality surveillance requirements are proposed at a later time, those revisions might result in such effects. Any such effects would be addressed as appropriate if and when such revisions are proposed.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. However, the EPA

[116] See ''VII. Description of the Proposal'' in ''Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects funded or Approved Under Title 23 U.S.C. or the Federal Transit Act.'' (58 FR 3768, January 11, 1993). EPA finalized the original transportation conformity regulations on November 24, 1993 (58 FR 62188). The rule has subsequently been revised and the current provisions of the transportation conformity rule are found at 40 CFR part 93, subpart A.

[117] Under CAA section 176(c)(1), Federal agencies have the affirmative responsibility to assure their actions achieve conformity to the purpose of an implementation plan, where the term ''conformity to an implementation plan'' is defined at CAA sections 176(c)(1)(A) and 176(c)(1)(B). Under CAA section 176(c)(4) the EPA is required to establish criteria and procedures for determining conformity.

[118] Applicability of the General Conformity program to any newly designated nonattainment area for a specific NAAQS begins one year following the effective date of the final nonattainment designation, as allowed under CAA section 176(c)(6) and 40 CFR 93.153(k).

recognizes that states will have a substantial interest in this action and any future revisions to associated requirements.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have Tribal implications, as specified in Executive Order 13175. It does not have a substantial direct effect on one or more Indian Tribes as Tribes are not obligated to adopt or implement any NAAQS. Thus, Executive Order 13175 does not apply to this action. However, consistent with the *EPA Policy on Consultation and Coordination with Indian Tribes,* the EPA will offer government-to-government consultation with Tribes as requested.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of ''covered regulatory action'' in section 2–202 of the Executive order.

Therefore, this action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk. Since this action does not concern human health, EPA's Policy on Children's Health also does not apply.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a ''significant energy action'' because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. The purpose of this action is to propose to revise the existing secondary SO_2 standard, and also to propose to retain the current secondary standards for NO_2, $PM_{2.5}$ and PM_{10}. The action does not prescribe specific pollution control strategies by which these ambient air standards and monitoring revisions will be met. Such strategies will be developed by states on a case-by-case basis, and the EPA cannot predict whether the control options selected by states will include regulations on energy suppliers, distributors, or users. Thus, the EPA concludes that this proposal does not constitute a significant energy action as defined in Executive Order 13211.

I. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. The EPA is proposing to use the existing indicator, SO_2, for measurements in support of this action. To the extent feasible, the EPA employs a Performance-Based Measurement System (PBMS), which does not require the use of specific, prescribed analytic methods. The PBMS is defined as a set of processes wherein the data quality needs, mandates or limitations of a program or project are specified and serve as criteria for selecting appropriate methods to meet those needs in a cost-effective manner. It is intended to be more flexible and cost effective for the regulated community; it is also intended to encourage innovation in analytical technology and improved data quality. Though the FRM for the NAAQS indicators defines the particular specifications for ambient air monitors, there is some variability with regard to how monitors can measure the pollutants, including SO_2. Therefore, it is not practically possible to fully define the FRM in performance terms to account for this possible or realized variability in measurement principles of operation. Nevertheless, our approach in the past has resulted in multiple brands of monitors being approved as FRM for SO_2, and we expect this to continue. Also, the FRMs described in 40 CFR part 50 and the equivalency criteria described in 40 CFR part 53, constitute a performance-based measurement system for SO_2, since methods that meet the field testing and performance criteria can be approved as FEMs. The EPA is not precluding the use of any other method, whether it constitutes a voluntary consensus standard or not, as long as it meets the specified performance criteria and is approved as an FRM or FEM.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations and Executive Order 14096: Revitalizing Our Nation's Commitment to Environmental Justice for All

The EPA believes that the human health and environmental conditions that exist prior to this action do not result in disproportionate and adverse effects on communities with Environmental Justice (EJ) concerns. As discussed in sections II.D and II.E above, and Chapters 5 and 7 of the PA, the acid buffering capacity of waterbodies in key acid-sensitive ecoregions in recent years is estimated to meet protection targets in high percentages. As discussed in section II.C.2 above, impacts on acid-sensitive waterbodies, if sufficiently severe, would have the potential to impact the public welfare through impacts to fisheries. Although recent conditions do not indicate such a level of severity, to the extent local communities relied on such fisheries disproportionately to their representation in the population, such effects of the past (*e.g.,* effects associated with acidification risks of 20 or more years ago) would have had the potential for disproportionate impacts. Recent conditions do not indicate risk of aquatic acidification to such a level of severity and the available information for recent acid buffering capacity levels does not include evidence of disproportionate and adverse impacts on communities with EJ concerns. As the proposed action is to establish a new, more stringent standard to protect acid-sensitive waterbodies to recent levels and protect against recurrence of acidification effects from the past, for which the potential for disproportionate and adverse effects on local communities is unknown, the EPA believes that this action is not likely to result in new disproportionate and adverse effects on communities with EJ concerns. The information supporting this Executive order review is contained in the PA for this review and sections II.C, II.D and II.E of this document.

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List of Subjects in 40 CFR Part 50

Environmental protection, Air pollution control, Carbon monoxide, Lead, Nitrogen dioxide, Ozone, Particulate matter, Sulfur oxides.

Michael S. Regan,

Administrator.

For the reasons set forth in the preamble, the Environmental Protection Agency proposes to amend chapter I of title 40 of the Code of Federal Regulations as follows:

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

■ 1. The authority citation for part 50 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

■ 2. Add § 50.21 to read as follows:

§ 50.21 National secondary ambient air quality standards for sulfur oxides (sulfur dioxide).

(a) The national secondary ambient annual air quality standard for oxides of sulfur is [10–15] parts per billion (ppb), measured in the ambient air as sulfur dioxide (SO_2) by a reference method based on appendix A–1 and appendix A–2 of this part, or by a Federal Equivalent Method (FEM) designated in accordance with part 53 of this chapter.

(b) The secondary annual standard is met when the 3-year average of the annual SO_2 concentration is less than or equal to [10–15] ppb, as determined in accordance with appendix T of this part.

■ 3. Revise appendix T to part 50 to read as follows:

Appendix T to Part 50—Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide)

1. General

(a) This appendix explains the data handling conventions and computations necessary for determining when the primary and secondary national ambient air quality standards for Oxides of Sulfur as measured by Sulfur Dioxide (''SO_2 NAAQS'') specified in § 50.17 are met at an ambient air quality monitoring site. Sulfur dioxide (SO_2) is measured in the ambient air by a Federal reference method (FRM) based on appendix A or A–1 to this part or by a Federal equivalent method (FEM) designated in accordance with part 53 of this chapter. Data handling and computation procedures to be used in making comparisons between reported SO_2 concentrations and the levels of the SO_2 NAAQS are specified in the following sections.

(b) Decisions to exclude, retain, or make adjustments to the data affected by exceptional events, including natural events, are made according to the requirements and

process deadlines specified in §§ 50.1, 50.14 and 51.930 of this chapter.

(c) The terms used in this appendix are defined as follows:

Annual mean refers to the annual average of all the daily mean values as defined in section 5.2 of this appendix.

Daily maximum 1-hour values for SO_2 refers to the maximum 1-hour SO_2 concentration values measured from midnight to midnight (local standard time) that are used in NAAQS computations.

Daily mean values for SO_2 refers to the 24-hour average of 1-hour SO_2 concentration values measured from midnight to midnight (local standard time) that are used in NAAQS computations.

Design values are the metrics (*i.e.,* statistics) that are compared to the NAAQS levels to determine compliance, calculated as specified in section 5 of this appendix. The design value for the primary 1-hour NAAQS is the 3-year average of annual 99th percentile daily maximum 1-hour values for a monitoring site (referred to as the ''1-hour primary standard design value''). The design value for the secondary annual NAAQS is the 3-year average of the annual mean of daily mean values for a monitoring site (referred to as the ''annual secondary standard'').

99th percentile daily maximum 1-hour value is the value below which nominally 99 percent of all daily maximum 1-hour concentration values fall, using the ranking and selection method specified in section 5.1 of this appendix.

Pollutant Occurrence Code (POC) refers to a numerical code (1, 2, 3, *etc.*) used to distinguish the data from two or more monitors for the same parameter at a single monitoring site.

Quarter refers to a calendar quarter.

Year refers to a calendar year.

2. Requirements for Data Used for Comparisons With the SO_2 NAAQS and Data Reporting Considerations

(a) All valid FRM/FEM SO_2 hourly data required to be submitted to EPA's Air Quality System (AQS), or otherwise available to EPA, meeting the requirements of part 58 of this chapter including appendices A, C, and E shall be used in design value calculations. Multi-hour average concentration values collected by wet chemistry methods shall not be used.

(b) Data from two or more monitors from the same year at the same site reported to EPA under distinct Pollutant Occurrence Codes shall not be combined in an attempt to meet data completeness requirements. The Administrator will combine annual 99th percentile daily maximum concentration values from different monitors in different years, selected as described here, for the purpose of developing a valid 1-hour primary standard design value. If more than one of the monitors meets the completeness requirement for all four quarters of a year, the steps specified in section 5.1(a) of this appendix shall be applied to the data from the monitor with the highest average of the four quarterly completeness values to derive a valid annual 99th percentile daily maximum concentration. If no monitor is complete for all four quarters in a year, the steps specified in sections 3.1(c) and 5.1(a) of this appendix shall be applied to the data from the monitor with the highest average of the four quarterly completeness values in an attempt to derive a valid annual 99th percentile daily maximum concentration. Similarly, the Administrator will combine annual means from different monitors in different years, selected as described here, for the purpose of developing a valid annual secondary standard design value. If more than one of the monitors meets the completeness requirement for all four quarters of a year, the steps specified in section 5.2(a) of this appendix shall be applied to the data from the monitor with the highest average of the four quarterly completeness values to derive a valid annual mean. If no monitor is complete for all four quarters in a year, the steps specified in sections 3.2(c) and 5.2(a) of this appendix shall be applied to the data from the monitor with the highest average of the four quarterly completeness values in an attempt to derive a valid annual mean. This paragraph does not prohibit a monitoring agency from making a local designation of one physical monitor as the primary monitor for a Pollutant Occurrence Code and substituting the 1-hour data from a second physical monitor whenever a valid concentration value is not obtained from the primary monitor; if a monitoring agency substitutes data in this manner, each substituted value must be accompanied by an AQS qualifier code indicating that substitution with a value from a second physical monitor has taken place.

(c) Hourly SO_2 measurement data shall be reported to AQS in units of parts per billion (ppb), to at most one place after the decimal, with additional digits to the right being truncated with no further rounding.

3. Comparisons With the NAAQS

3.1 Comparisons With the 1-Hour Primary SO_2 NAAQS

(a) The 1-hour primary SO_2 NAAQS is met at an ambient air quality monitoring site when the valid 1-hour primary standard design value is less than or equal to 75 parts per billion (ppb).

(b) An SO_2 1-hour primary standard design value is valid if it encompasses three consecutive calendar years of complete data. A year meets data completeness requirements when all four quarters are complete. A quarter is complete when at least 75 percent of the sampling days for each quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, are reported.

(c) In the case of one, two, or three years that do not meet the completeness requirements of section 3.1(b) of this appendix and thus would normally not be useable for the calculation of a valid 3-year 1-hour primary standard design value, the 3-year 1-hour primary standard design value shall nevertheless be considered valid if one of the following conditions is true.

(i) At least 75 percent of the days in each quarter of each of three consecutive years have at least one reported hourly value, and the design value calculated according to the procedures specified in section 5.1 is above the level of the primary 1-hour standard.

(ii)(A) A 1-hour primary standard design value that is equal to or below the level of the NAAQS can be validated if the substitution test in section 3.1(c)(ii)(B) of this appendix results in a ''test design value'' that is below the level of the NAAQS. The test substitutes actual ''high'' reported daily maximum 1-hour values from the same site at about the same time of the year (specifically, in the same calendar quarter) for unknown values that were not successfully measured. *Note* that the test is merely diagnostic in nature, intended to confirm that there is a very high likelihood that the original design value (the one with less than 75 percent data capture of hours by day and of days by quarter) reflects the true under-NAAQS-level status for that 3-year period; the result of this data substitution test (the ''test design value,'' as defined in section 3.1(c)(ii)(B) of this appendix) is not considered the actual design value. For this test, substitution is permitted only if there are at least 200 days across the three matching quarters of the three years under consideration (which is about 75 percent of all possible daily values in those three quarters) for which 75 percent of the hours in the day, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, have reported concentrations. However, maximum 1-hour values from days with less than 75 percent of the hours reported shall also be considered in identifying the high value to be used for substitution.

(B) The substitution test is as follows: Data substitution will be performed in all quarter periods that have less than 75 percent data capture but at least 50 percent data capture, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator; if any quarter has less than 50 percent data capture then this substitution test cannot be used. Identify for each quarter (*e.g.,* January–March) the highest reported daily maximum 1-hour value for that quarter, excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, looking across those three months of all three years under consideration. All daily maximum 1-hour values from all days in the quarter period shall be considered when identifying this highest value, including days with less than 75 percent data capture. If after substituting the highest reported daily maximum 1-hour value for a quarter for as much of the missing daily data in the matching deficient quarter(s) as is needed to make them 100 percent complete, the procedure in section 5 yields a recalculated 3-year 1-hour standard ''test design value'' less than or equal to the level of the standard, then the 1-hour primary standard design value is deemed to have passed the diagnostic test and is valid, and the level of the standard is deemed to have been met in that 3-year period. As noted in section 3.1(c)(i) of this appendix, in such a case, the 3-year design value based on the data actually reported, not the ''test design

value,'' shall be used as the valid design value.

(iii)(A) A 1-hour primary standard design value that is above the level of the NAAQS can be validated if the substitution test in section 3.1(c)(iii)(B) of this appendix results in a ''test design value'' that is above the level of the NAAQS. The test substitutes actual ''low'' reported daily maximum 1-hour values from the same site at about the same time of the year (specifically, in the same three months of the calendar) for unknown hourly values that were not successfully measured. Note that the test is merely diagnostic in nature, intended to confirm that there is a very high likelihood that the original design value (the one with less than 75 percent data capture of hours by day and of days by quarter) reflects the true above-NAAQS-level status for that 3-year period; the result of this data substitution test (the ''test design value,'' as defined in section 3.1(c)(iii)(B) of this appendix) is not considered the actual design value. For this test, substitution is permitted only if there are a minimum number of available daily data points from which to identify the low quarter-specific daily maximum 1-hour values, specifically if there are at least 200 days across the three matching quarters of the three years under consideration (which is about 75 percent of all possible daily values in those three quarters) for which 75 percent of the hours in the day have reported concentrations. Only days with at least 75 percent of the hours reported shall be considered in identifying the low value to be used for substitution.

(B) The substitution test is as follows: Data substitution will be performed in all quarter periods that have less than 75 percent data capture. Identify for each quarter (*e.g.,* January–March) the lowest reported daily maximum 1-hour value for that quarter, looking across those three months of all three years under consideration. All daily maximum 1-hour values from all days with at least 75 percent capture in the quarter period shall be considered when identifying this lowest value. If after substituting the lowest reported daily maximum 1-hour value for a quarter for as much of the missing daily data in the matching deficient quarter(s) as is needed to make them 75 percent complete, the procedure in section 5.1 of this appendix yields a recalculated 3-year 1-hour standard ''test design value'' above the level of the standard, then the 1-hour primary standard design value is deemed to have passed the diagnostic test and is valid, and the level of the standard is deemed to have been exceeded in that 3-year period. As noted in section 3.1(c)(i) of this appendix, in such a case, the 3-year design value based on the data actually reported, not the ''test design value'', shall be used as the valid design value.

(d) A 1-hour primary standard design value based on data that do not meet the completeness criteria stated in section 3.1(b) of this appendix and also do not satisfy section 3.1(c) of this appendix, may also be considered valid with the approval of, or at the initiative of, the Administrator, who may consider factors such as monitoring site closures/moves, monitoring diligence, the consistency and levels of the valid concentration measurements that are available, and nearby concentrations in determining whether to use such data.

(e) The procedures for calculating the 1-hour primary standard design values are given in section 5.1 of this appendix.

3.2 Comparisons With the Annual Secondary SO_2 NAAQS

(a) The annual secondary SO_2 NAAQS is met at an ambient air quality monitoring site when the valid annual secondary standard design value is less than or equal to [10–15] parts per billion (ppb).

(b) An SO_2 annual secondary standard design value is valid if it encompasses three consecutive calendar years of complete data. A year meets data completeness requirements when all four quarters are complete. A quarter is complete when at least 75 percent of the sampling days for each quarter have complete data. A sampling day has complete data if 75 percent of the hourly concentration values, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, are reported.

(c) In the case of one, two, or three years that do not meet the completeness requirements of section 3.2(b) of this appendix and thus would normally not be useable for the calculation of a valid 3-year annual secondary standard design value, the 3-year annual secondary standard design value shall nevertheless be considered valid if one of the following conditions is true.

(i) At least 75 percent of the days in each quarter of each of three consecutive years have at least one reported hourly value, and the design value calculated according to the procedures specified in section 5.2 of this appendix is above the level of the secondary annual standard.

(ii)(A) An annual secondary standard design value that is equal to or below the level of the NAAQS can be validated if the substitution test in section 3.2(c)(ii)(B) of this appendix results in a ''test design value'' that is below the level of the NAAQS. The test substitutes actual ''high'' reported daily mean values from the same site at about the same time of the year (specifically, in the same calendar quarter) for unknown or incomplete (less than 75 percent of hours reported) daily mean values. *Note* that the test is merely diagnostic in nature, intended to confirm that there is a very high likelihood that the original design value (the one with less than 75 percent data capture of hours by day and of days by quarter) reflects the true under-NAAQS-level status for that 3-year period; the result of this data substitution test (the ''test design value,'' as defined in section 3.2(c)(ii)(B)) of this appendix is not considered the actual design value. For this test, substitution is permitted only if there are at least 200 days across the three matching quarters of the three years under consideration (which is about 75 percent of all possible daily values in those three quarters) for which 75 percent of the hours in the day, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, have reported concentrations. However, daily mean values from days with less than 75 percent of the hours reported shall also be considered in identifying the high daily mean value to be used for substitution.

(B) The substitution test is as follows: Data substitution will be performed in all quarter periods that have less than 75 percent data capture but at least 50 percent data capture, including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator; if any quarter has less than 50 percent data capture then this substitution test cannot be used. Identify for each quarter (*e.g.,* January–March) the highest reported daily mean value for that quarter, excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator, looking across those three months of all three years under consideration. All daily mean values from all days in the quarter period shall be considered when identifying this highest value, including days with less than 75 percent data capture. If after substituting the highest daily mean value for a quarter for as much of the missing daily data in the matching deficient quarter(s) as is needed to make them 100 percent complete, the procedure in section 5 of this appendix yields a recalculated 3-year annual standard ''test design value'' less than or equal to the level of the standard, then the annual secondary standard design value is deemed to have passed the diagnostic test and is valid, and the level of the standard is deemed to have been met in that 3-year period. As noted in section 3.2(c)(i) of this appendix, in such a case, the 3-year design value based on the data actually reported, not the ''test design value,'' shall be used as the valid design value.

(iii)(A) An annual secondary standard design value that is above the level of the NAAQS can be validated if the substitution test in section 3.2(c)(iii)(B) of this appendix results in a ''test design value'' that is above the level of the NAAQS. The test substitutes actual ''low'' reported daily mean values from the same site at about the same time of the year (specifically, in the same three months of the calendar) for unknown or incomplete (less than 75 percent of hours reported) daily mean values. Note that the test is merely diagnostic in nature, intended to confirm that there is a very high likelihood that the original design value (the one with less than 75 percent data capture of hours by day and of days by quarter) reflects the true above-NAAQS-level status for that 3-year period; the result of this data substitution test (the ''test design value,'' as defined in section 3.2(c)(iii)(B) of this appendix) is not considered the actual design value. For this test, substitution is permitted only if there are a minimum number of valid daily mean values from which to identify the low quarter-specific daily mean values, specifically if there are at least 200 days across the three matching quarters of the three years under consideration (which is about 75 percent of all possible daily values in those three quarters) for which 75 percent of the hours in the day have reported concentrations. Only days with at least 75

percent of the hours reported shall be considered in identifying the low daily mean value to be used for substitution.

(B) The substitution test is as follows: Data substitution will be performed in all quarter periods that have less than 75 percent data capture. Identify for each quarter (*e.g.,* January–March) the lowest reported daily mean value for that quarter, looking across those three months of all three years under consideration. All daily mean values from all days with at least 75 percent capture in the quarter period shall be considered when identifying this lowest value. If after substituting the lowest reported daily mean value for a quarter for as much of the missing daily data in the matching deficient quarter(s) as is needed to make them 75 percent complete, the procedure in section 5.2 of this appendix yields a recalculated 3-year annual standard ''test design value'' above the level of the standard, then the annual secondary standard design value is deemed to have passed the diagnostic test and is valid, and the level of the standard is deemed to have been exceeded in that 3-year period. As noted in section 3.2(c)(i) of this appendix, in such a case, the 3-year design value based on the data actually reported, not the ''test design value,'' shall be used as the valid design value.

(d) An annual secondary standard design value based on data that do not meet the completeness criteria stated in section 3.2(b) of this appendix and also do not satisfy section 3.2(c) of this appendix, may also be considered valid with the approval of, or at the initiative of, the Administrator, who may consider factors such as monitoring site closures/moves, monitoring diligence, the consistency and levels of the valid concentration measurements that are available, and nearby concentrations in determining whether to use such data.

(e) The procedures for calculating the annual secondary standard design values are given in section 5.2 of this appendix.

4. Rounding Conventions

4.1 Rounding Conventions for the 1-Hour Primary SO_2 NAAQS

(a) Hourly SO_2 measurement data shall be reported to AQS in units of parts per billion (ppb), to at most one place after the decimal, with additional digits to the right being truncated with no further rounding.

(b) Daily maximum 1-hour values and, therefore, the annual 99th percentile of those daily values are not rounded.

(c) The 1-hour primary standard design value is calculated pursuant to section 5.1 of this appendix and then rounded to the nearest whole number or 1 ppb (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number).

4.2 Rounding Conventions for the Annual Secondary SO_2 NAAQS

(a) Hourly SO_2 measurement data shall be reported to AQS in units of parts per billion (ppb), to at most one place after the decimal, with additional digits to the right being truncated with no further rounding.

(b) Daily mean values and the annual mean of those daily values are not rounded.

(c) The annual secondary standard design value is calculated pursuant to section 5.2 of this appendix and then rounded to the nearest whole number or 1 ppb (decimals 0.5 and greater are rounded up to the nearest whole number, and any decimal lower than 0.5 is rounded down to the nearest whole number).

5. Calculation Procedures

5.1 Calculation Procedures for the 1-Hour Primary SO_2 NAAQS

(a) *Procedure for identifying annual 99th percentile values.* When the data for a particular ambient air quality monitoring site and year meet the data completeness requirements in section 3.1(b) of this appendix, or if one of the conditions of section 3.1(c) of this appendix is met, or if the Administrator exercises the discretionary authority in section 3.1(d) of this appendix, identification of annual 99th percentile value is accomplished as follows.

(i) The annual 99th percentile value for a year is the higher of the two values resulting from the following two procedures.

(A) *Procedure 1.* For the year, determine the number of days with at least 75 percent of the hourly values reported.

(1) For the year, determine the number of days with at least 75 percent of the hourly values reported including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(2) For the year, from only the days with at least 75 percent of the hourly values reported, select from each day the maximum hourly value excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(3) Sort all these daily maximum hourly values from a particular site and year by descending value. (For example: (x[1], x[2], x[3], * * *, x[n]). In this case, x[1] is the largest number and x[n] is the smallest value.) The 99th percentile is determined from this sorted series of daily values which is ordered from the highest to the lowest number. Using the left column of table 1, determine the appropriate range (*i.e.,* row) for the annual number of days with valid data for year y (cn_y). The corresponding ''n'' value in the right column identifies the rank of the annual 99th percentile value in the descending sorted list of daily site values for year y. Thus, $P_{0.99,\,y}$ = the nth largest value.

(B) *Procedure 2.* For the year, determine the number of days with at least one hourly value reported.

(1) For the year, determine the number of days with at least one hourly value reported including State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(2) For the year, from all the days with at least one hourly value reported, select from each day the maximum hourly value excluding State-flagged data affected by exceptional events which have been approved for exclusion by the Administrator.

(3) Sort all these daily maximum values from a particular site and year by descending value. (For example: (x[1], x[2], x[3], * * *, x[n]). In this case, x[1] is the largest number and x[n] is the smallest value.) The 99th percentile is determined from this sorted series of daily values which is ordered from the highest to the lowest number. Using the left column of table 1, determine the appropriate range (*i.e.,* row) for the annual number of days with valid data for year y (cn_y). The corresponding ''n'' value in the right column identifies the rank of the annual 99th percentile value in the descending sorted list of daily site values for year y. Thus, $P_{0.99,y}$ = the nth largest value.

(b) The 1-hour primary standard design value for an ambient air quality monitoring site is mean of the three annual 99th percentile values, rounded according to the conventions in section 4.1 of this appendix.

TABLE 1 OF APPENDIX T OF PART 50

Annual number of days with valid data for year ''y'' (cn_y)	$P_{0.99,y}$ is the nth maximum value of the year, where n is the listed number
1–100	1
101–200	2
201–300	3
301–366	4

5.2 Calculation Procedures for the Annual Secondary SO_2 NAAQS

(a) When the data for a site and year meet the data completeness requirements in section 3.2(b) of this appendix, or if the Administrator exercises the discretionary authority in section 3.2(c), the annual mean is simply the arithmetic average of all the daily mean values.

(b) The annual secondary standard design value for an ambient air quality monitoring site is the mean of the annual means for three consecutive years, rounded according to the conventions in section 4.2 of this appendix.

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Part V

Department of Transportation

National Highway Traffic Safety Administration

49 CFR Part 571

Federal Motor Vehicle Safety Standards; FMVSS No. 305a Electric-Powered Vehicles: Electric Powertrain Integrity Global Technical Regulation No. 20, Incorporation by Reference; Proposed Rule

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–2024–0012]

RIN 2127–AM43

Federal Motor Vehicle Safety Standards; FMVSS No. 305a Electric-Powered Vehicles: Electric Powertrain Integrity Global Technical Regulation No. 20, Incorporation by Reference

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: Consistent with a Global Technical Regulation on electric vehicle safety, NHTSA proposes to establish Federal Motor Vehicle Safety Standard (FMVSS) No. 305a to replace FMVSS No. 305, ''Electric-powered vehicles: Electrolyte spillage and electrical shock protection.'' Among other improvements, FMVSS No. 305a would apply to light and heavy vehicles and would have performance and risk mitigation requirements for the propulsion battery. Relating to a National Transportation Safety Board recommendation, FMVSS No. 305a would also require manufacturers to submit standardized emergency response information for inclusion on NHTSA's website that would assist first and second responders handling electric vehicles.

DATES: Comments should be submitted no later than June 14, 2024.

Proposed compliance date: We propose that the compliance date for the proposed requirements be two years after the date of publication of the final rule in the **Federal Register**. Small-volume manufacturers, final-stage manufacturers, and alterers would be provided an additional year to comply with the rule beyond the date identified above. We propose to permit optional early compliance with the rule. After FMVSS No. 305a is finalized, NHTSA intends to sunset FMVSS No. 305.

ADDRESSES: You may submit comments identified by the docket number in the heading of this document or by any of the following methods:

- *Federal eRulemaking Portal:* Go to *http://www.regulations.gov.* Follow the instructions for submitting comments on the electronic docket site by clicking on ''Help'' or ''FAQ.''
- *Mail:* Docket Management Facility. M–30, U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Room W12–140, Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, 1200 New Jersey Avenue SE, West Building, Ground Floor, Room W12–140, Washington, DC 20590 between 9 a.m. and 5 p.m. Eastern Time, Monday through Friday, except Federal Holidays.
- *Fax:* 202–493–2251.

Instructions: All submissions must include the agency name and docket number. Note that all comments received will be posted without change to *http://www.regulations.gov,* including any personal information provided. Please see the Privacy Act discussion below. We will consider all comments received before the close of business on the comment closing date indicated above. To the extent possible, we will also consider comments filed after the closing date.

Docket: For access to the docket to read background documents or comments received, go to *www.regulations.gov* at any time or to 1200 New Jersey Avenue SE, West Building Ground Floor, Room W12–140, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal Holidays. Telephone: 202–366–9826.

Confidential Business Information: If you claim that any of the information in your comment (including any additional documents or attachments) constitutes confidential business information within the meaning of 5 U.S.C. 552(b)(4) or is protected from disclosure pursuant to 18 U.S.C. 1905, please see the detailed instructions given under the Public Participation heading of the **SUPPLEMENTARY INFORMATION** section of this document.

Privacy Act: In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its decision-making process. DOT posts these comments, without edit, including any personal information the commenter provides, to *www.regulations.gov,* as described in the system of records notice (DOT/ALL–14 FDMS), which can be reviewed at *www.transportation.gov/privacy.* In order to facilitate comment tracking and response, we encourage commenters to provide their name, or the name of their organization; however, submission of names is completely optional. Whether or not commenters identify themselves, all timely comments will be fully considered.

FOR FURTHER INFORMATION CONTACT: For technical issues, you may contact Ms. Lina Valivullah, Office of Crashworthiness Standards; Telephone: 202–366–8786; Email: *Lina.Valivullah@dot.gov;* Facsimile: (202) 493–2739. For legal issues, you may contact Ms. K. Helena Sung, Office of Chief Counsel; Telephone: 202–366–2992; Email: *Helena.Sung@dot.gov;* Facsimile: (202) 366–3820. The mailing address of these officials is: National Highway Traffic Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590.

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I. Executive Summary

NHTSA is issuing this NPRM to achieve two goals. First, NHTSA proposes to establish FMVSS No. 305a, ''Electric-powered Vehicles: Electric Powertrain Integrity,'' to upgrade and replace existing FMVSS No. 305. Proposed FMVSS No. 305a would have all the requirements of FMVSS No. 305, but the proposed standard would expand its applicability to vehicles with a gross vehicle weight rating (GVWR) greater than 4,536 kilograms (kg) (10,000 pounds (lb)) and add requirements and test procedures covering new aspects of electric vehicle safety, such as the performance and risk mitigation requirements for the propulsion battery, referred to as the Rechargeable Electrical Energy Storage System (REESS). NHTSA is also proposing requirements to ensure first and second responders have access to vehicle-specific information about extinguishing REESS fires and mitigating safety risks associated with stranded energy [1] when responding to emergencies. The restructured and upgraded FMVSS No. 305a will facilitate future updates to the standard as battery technologies and charging systems continue to evolve. After FMVSS No. 305a is finalized, NHTSA intends to sunset FMVSS No. 305.

The second goal is to further NHTSA's effort to harmonize the Federal Motor Vehicle Safety Standards under the Economic Commission for Europe 1998 Global Agreement (''1998 Agreement''). The efforts of the U.S. and other contracting parties to the 1998 Agreement culminated in the establishment of Global Technical Regulation (GTR) No. 20, ''Electric Vehicle Safety.'' [2] FMVSS No. 305 already incorporates a substantial portion of GTR No. 20's requirements due to a previous NHTSA rulemaking. In 2017, NHTSA amended FMVSS No. 305 to include electrical safety requirements from GTR No. 13, ''Hydrogen and fuel cell vehicles,'' pertaining to electric vehicle performance during normal vehicle operation and post-crash.[3] Because GTR No. 13's provisions for electric vehicles were later incorporated into what would become GTR No. 20, the 2017 final rule that adopted GTR No. 13's provisions adopted what later became many of the requirements of GTR No. 20. That 2017 rulemaking, however, did not expand the applicability of FMVSS No. 305 to include heavy vehicles nor did it include requirements for the REESS. This NPRM proposes these and other GTR No. 20 requirements.

High Level Summary of the Proposal

FMVSS No. 305 currently only applies to passenger cars and to multipurpose passenger vehicles, trucks, and buses with a GVWR of 4,536 kg (10,000 lb) or less (''light vehicles''). Consistent with GTR No. 20, proposed FMVSS No. 305a expands the current applicability of FMVSS No. 305 to vehicles with a GVWR greater than 4,536 kg (10,000 lb) (''heavy vehicles''). Under proposed FMVSS No. 305a:

- Light vehicles would be subject to requirements carried over from FMVSS No. 305 that ensure the safety of the electrical system during normal vehicle operations and after a crash (post-crash).[4] They would also be subject to new requirements for the REESS.
- Heavy vehicles would be subject to the requirements for electrical system safety during normal vehicle operations and to requirements for the REESS. However, except for heavy school buses, they would not be subject to post-crash requirements. This proposed exclusion of heavy vehicles, other than school buses, from crash tests, aligns with similar exclusions in FMVSS No. 301, ''Fuel system integrity,'' for conventional fuel vehicles and FMVSS No. 303, ''Fuel system integrity of compressed natural gas vehicles,'' for compressed natural gas vehicles.
- Heavy school buses (GVWRs greater than 4,536 kg (10,000 lb)) [5] would be subject to the requirements for electrical system safety during normal vehicle operations and to the requirements for the REESS, and would have to meet post-crash test requirements to ensure the vehicles protect against unreasonable risk of electric shock and risk of fire after a crash. The post-crash tests are the same tests described in FMVSS No. 301 for heavy school buses (impacted at any point and at any angle by a moving contoured barrier).

The post-crash requirements of proposed FMVSS No. 305a for light vehicles and heavy school buses include electric shock protection (there are four compliance options—low voltage, electrical isolation, protective barrier, and low energy for capacitors [6]); REESS retention; electrolyte leakage; and fire safety. The requirements for REESS retention and electrolyte leakage are already in FMVSS No. 305, but this NPRM proposes to enhance some provisions consistent with GTR No. 20. For example, current FMVSS No. 305 does not specify that there must be no fire or explosion after a crash test. Electric vehicles may catch fire long after a collision or other occurrence resulting in a fault condition. To account for the potential delayed response, NHTSA is proposing to prohibit fire or explosion for a one-hour post-test period.

A substantial portion of this NPRM focuses on safety provisions for the propulsion battery, the REESS. For what would be the first time in an FMVSS, proposed FMVSS No. 305a includes comprehensive performance requirements and risk mitigation strategies for the REESS. These REESS requirements would apply to all vehicles, regardless of GVWR. A REESS provides electric energy for propulsion and may include necessary ancillary systems for physical support, thermal management, electronic controls, and casings. The proposed requirements set a level of protection of the REESS against external fault inputs, ensure the REESS operations are within the manufacturer-specified functional range, and increase the likelihood of safe operation of the REESS and other electrical systems of the vehicle during

[1] Stranded energy is the energy remaining inside the REESS after a crash or other incident.

[2] GTR No. 20, *https://unece.org/fileadmin/DAM/trans/main/wp29/wp29wgs/wp29gen/wp29registry/ECE-TRANS-180a20e.pdf*.

[3] GTR No. 13 only applied to light vehicles. Normal vehicle operations include operating modes and conditions that can reasonably be encountered during typical operation of the vehicle, such as driving, parking, standing in traffic with vehicle in drive mode, and charging. Final rule, 82 FR 44950, September 27, 2017.

[4] Current FMVSS No. 305 light vehicle post-crash test requirements (front, side, and rear crashes) are aligned with FMVSS No. 301's light vehicle post-crash test requirements.

[5] In the school bus safety area, stakeholders, including NHTSA, commonly refer to buses with a GVWR over 4,536 kg (10,000 lb) as ''large'' school buses.

[6] FMVSS No. 305 already includes the first three compliance options for electrical shock protection but not the low energy option that is available for capacitors in GTR No. 20. This NPRM would complete the alignment by proposing the low energy option for capacitors in FMVSS No. 305a. NHTSA had considered this option years ago and had decided against it. As explained in detail in sections below, NHTSA has changed its view on the matter after further considering data and analysis from the GTR.

and after water exposure during normal vehicle operations.[7]

Proposed FMVSS No. 305a addresses some aspects of REESS safety through documentation measures, consistent with GTR No. 20. ''Documentation measures'' means a list of information provided by manufacturers, at NHTSA's request, that demonstrate that they considered, assessed, and mitigated identified risks for safe operation of the vehicle. These proposed documentation requirements would address: (a) safety risk mitigation associated with charging and discharging during low temperature; (b) the safety risks from thermal propagation in the event of single-cell thermal runaway [8] (SCTR) due to an internal short-circuit of a single cell; and (c) providing a warning if there is a malfunction of vehicle controls that manage REESS safe operation. The GTR takes a documentation approach on these aspects of safety because of the rapidly evolving electric vehicle technologies and the variety of available REESS and electric vehicle designs. The Informal Working Group experts that drafted the GTR determined there currently are no objective test procedures to evaluate safety risk mitigation designs or the operations of warnings of a malfunction of vehicle controls in a manner that is not design restrictive.

NHTSA tentatively agrees with this approach given the current state of knowledge. Thus, until test procedures and performance criteria can be developed for all vehicle powertrain architectures, proposed FMVSS No. 305a would require manufacturers to submit documentation to NHTSA, at NHTSA's request, that identify all known safety hazards, describe their risk mitigation strategies for the safety hazards, and, if applicable, describe how they provide a warning to address a safety hazard.[9] The purpose of the documentation approach is two-fold. Given the variation of battery design and design specific risk mitigation systems, the documentation requirement would be a means of assuring that each manufacturer has identified safety risks and safety risk mitigation strategies. The requirement provides a means for NHTSA to learn of the risks associated with the REESS, understand how the manufacturer is addressing the risks, and oversee those safety hazards. This approach is battery technology neutral, not design restrictive, and is intended to evolve over time as battery technologies continue to rapidly evolve. It is an interim measure intended to assure that manufacturers will identify and address the safety risks of the REESS until such time objective performance standards can be developed that can be applied to all applicable REESS designs. NHTSA would also acquire information from the submissions to learn about the safety of the REESS and potentially develop the future performance standards for FMVSS No. 305a. The proposed documentation requirements are based on the approach of GTR No. 20, but NHTSA proposes to focus the GTR's documentation requirements to enable the agency to obtain more targeted information from manufacturers.[10]

As part of NHTSA's battery initiative [11] and in response to a 2020 NTSB recommendation,[12] this NPRM proposes to include in FMVSS No. 305a a requirement that vehicle manufacturers submit to NHTSA emergency response guides (ERGs) and rescue sheets for each vehicle make, model, and model year. The purpose of the requirement is to provide information to first [13] and second [14] responders regarding the safe handling of the vehicle in emergencies and for towing and storing operations. The uploaded ERGs and rescue sheets would be publicly available on NHTSA's website for easy searchable access. ERGs and rescue sheets communicate vehicle-specific information related to fire, submersion, and towing, as well as the location of components in the vehicle that may expose the vehicle occupants or rescue personnel to risks, the nature of a specific function or danger, and devices or measures which inhibit a dangerous state.

NHTSA would require standardized formatting of the information. The ERG and rescue sheet requirements would meet the layout and format specified in ISO–17840, ''Road vehicles—Information for first and second responders,'' which standardize color-coded sections in a specific order to help first and second responders quickly identify pertinent vehicle-specific rescue information. The standardized information would be available and understandable to first and second responders so they can easily refer to vehicle-specific rescue information en route to or at the scene of a crash or fire event and respond to the emergency quickly and safely.

NHTSA believes there are no notable costs associated with this NPRM. This proposal closely mirrors the electrical safety provisions of GTR No. 20, which have been voluntarily implemented by manufacturers in this country. The agency believes that the proposed safety standards are widely implemented by manufacturers of light and heavy electric vehicles and heavy electric school buses. Manufacturers are also already providing emergency response information to the National Fire Protection Association (NFPA); under proposed FMVSS No. 305a they would just have to standardize the format and submit the information to NHTSA.[15]

Lastly, current FMVSS No. 305 does not apply to vehicles that travel under 40 km/h (25 mph), such as low-speed vehicles.[16] Given there are low-speed vehicles that are also electric-powered vehicles, NHTSA requests comments on the possibility of applying aspects of FMVSS No. 305a to low-speed vehicles to ensure a level of protection against shock and fire, particularly during normal vehicle operation, and to assure the safe operation of the REESS.

II. Background

a. Overview of FMVSS No. 305

The purpose of FMVSS No. 305, ''Electric-powered vehicles: electrolyte

[7] ''Normal vehicle operation'' means situations such as driving through a pool of standing water or exposing the vehicle to an automated car wash. This NPRM does not propose requirements to address vehicle fires due to vehicle submersions in floods and storm surges, as GTR No. 20 does not have specific requirements to address this area. NHTSA is researching this latter area.

[8] Thermal runaway means an uncontrolled increase of cell temperature caused by exothermic reactions inside the cell.

[9] Section 30166 of the Vehicle Safety Act authorizes the Secretary of Transportation (NHTSA by delegation) the ability to request and inspect manufacturer records that are necessary to enforce the prescribed regulations.

[10] Given the proposed documentation specifications are more akin to disclosure requirements that could be issued under general NHTSA regulation rather than pursuant to an FMVSS with specified test procedures, the agency also requests comment on whether the proposed documentation requirements would be better placed in a general agency regulation than in the proposed FMVSS No. 305a.

[11] *https://www.nhtsa.gov/battery-safety-initiative.*

[12] ''Safety risks to emergency responders from lithium-ion battery fires in electric vehicles,'' Safety Report NTSB/SR–20/01, PB2020–101011, National Transportation Safety Board, *https://www.ntsb.gov/safety/safety-studies/Documents/SR2001.pdf.*

[13] ''First responder'' means a person with specialized training such as a law enforcement officer, paramedic, emergency medical technician, and/or firefighter, who is typically one of the first to arrive and provide assistance at the scene of an emergency.

[14] ''Second responder'' means a worker who supports first responders by cleaning up a site, towing vehicles, and/or returning services after an event requiring first responders.

[15] Similar to the issue discussed above regarding having the proposed documentation requirements in a general regulation rather than in FMVSS No. 305a, the agency also requests comment on whether the proposed ERG and rescue sheet requirements would be better placed in a general agency regulation than in proposed FMVSS No. 305a.

[16] ''Low-speed vehicle'' is defined in 49 CFR 571.3. See also FMVSS No. 500, ''Low speed vehicles,'' 49 CFR 500.

spillage and electrical shock protection,'' is to reduce deaths and injuries from electrical shock. The standard applies only to light vehicles (vehicles with a GVWR less than or equal to 4,536 (kg) (10,000 (lb)). The standard's requirements reduce the risk of harmful electric shock: (a) during normal vehicle operation; [17] and (b) in post-crash situations (to protect vehicle occupants, and rescue workers and others who may come in contact with the vehicle after a crash). The standard's requirements for the former protect against direct and indirect contact of high voltage sources during everyday operation of the vehicles. The focus of this ''in-use'' testing (unlike ''post-crash'' testing, discussed below) deals with performance criteria that would be assessed without first exposing the vehicle to a crash test.

Normal Vehicle Operations. FMVSS No. 305 requires vehicles to provide the following measures to protect against electric shock during normal vehicle operations. Vehicles must prevent direct contact of high voltage sources (those operating with voltage greater than 30 VAC or 60 VDC) [18]; prevent indirect contact of high voltage sources; electrically isolate high voltage sources from the electric chassis (500 ohms/volt or higher for alternating current (AC) and 100 ohms/volt or higher for direct current (DC) sources); mitigate risk of driver error (indicate to the driver when the vehicle is in possible active driving mode at startup and when the driver is leaving the vehicle, and prevent vehicle movement by its own propulsion system when the vehicle charging system is connected to the external electric power supply).

Post-Crash Protections. For post-crash protections, FMVSS No. 305 requires vehicles to meet the following provisions during and after the crash tests specified in the standard. FMVSS No. 305 limits electrolyte spillage from propulsion batteries and requires the REESS to remain attached to the vehicle and not enter the passenger compartment. The standard requires that during and after a crash test, high voltage sources in a vehicle must be either electrically isolated from the vehicle's chassis; of a voltage below specified levels considered safe from electric shock hazards; or prevented from direct or indirect contact by occupants or emergency services personnel by use of physical barriers. The standard specifies that the post-crash requirements must be met after crash tests involving: a frontal impact up to and including 48 kilometer per hour (km/h) (30 mile per hour (mph)) into a fixed collision barrier; an impact of a moving barrier at 80 km/h (50 mph) into the rear of the vehicle; an impact of a moving barrier at 53 km/h (33 mph) into the side of the vehicle; and under static rollover conditions after each such impact.

FMVSS No. 305 already has many of GTR No. 20's requirements for light vehicles, including requirements for electrical safety during normal vehicle operation; post-crash electrolyte spillage; post-crash REESS retention; and most of the GTR's post-crash electrical safety options for high voltage sources.

b. Overview of GTR No. 20

1. The GTR Process

The United States is a contracting party to the ''1998 Agreement'' (the Agreement concerning the Establishing of Global Technical Regulations for Wheeled Vehicles, Equipment and Parts which can be fitted and/or be used on Wheeled Vehicles). This agreement entered into force in 2000 and is administered by the UN Economic Commission for Europe's (UN ECE's) World Forum for the Harmonization of Vehicle Regulations (WP.29). The purpose of this agreement is to establish Global Technical Regulations (GTRs).

In March 2012, UNECE WP.29 formally adopted the proposal to establish GTR No. 20 at its one-hundred-and-fifty-eighth session. NHTSA chaired the development of GTR No. 20 and voted in favor of establishing GTR No. 20.

As a Contracting Party Member to the 1998 Global Agreement who voted in favor of GTR No. 20, NHTSA is obligated to initiate the process used in the U.S. to adopt the GTR as an agency regulation. By issuing this NPRM, NHTSA is initiating the process to consider adoption of GTR No. 20. As noted above, under the terms of the 1998 Agreement, NHTSA is not obligated to adopt the GTR after initiating this process. In deciding whether to adopt a GTR as an FMVSS, NHTSA follows the requirements for NHTSA rulemaking, including the Administrative Procedure Act, the National Traffic and Motor Vehicle Safety Act (Vehicle Safety Act), Presidential Executive Orders, and DOT and NHTSA policies, procedures, and regulations. Among other things, FMVSSs issued under the Vehicle Safety Act ''shall be practicable, meet the need for motor vehicle safety, and be stated in objective terms.'' [19]

2. GTR No. 20

GTR No. 20 establishes performance-orientated requirements that reduce potential safety risks of electric vehicles (EVs) while in use and after a crash event. The GTR includes provisions that address electrical shock associated with high voltage circuits of EVs and potential hazards associated with lithium-ion batteries and/or other REESS. One of the principles for developing GTR No. 20 was to address unique safety risks posed by electric vehicles and their components to ensure a safety level equivalent to conventional vehicles with internal combustion engines.

The requirements in GTR No. 20 were developed in Phase 1 of the GTR. GTR No. 20 was developed in phases due to the differing stages at which technologies have been developed and evaluated. The informal working group (IWG) that developed the GTR determined that Phase 1 would address issues relating to the safe operation of the rechargeable electrical energy storage system (REESS), and for mitigating risks of fire and other safety risks associated with the REESS. In Phase 2, which is on-going, the IWG is addressing issues involving long-term research and verification.[20] This NPRM pertains to the adoption of the GTR as developed in Phase 1.

GTR No. 20 applies to all electric-powered vehicles regardless of GVWR, in contrast to FMVSS No. 305, which only applies to light vehicles. FMVSS No. 305 currently includes the majority of GTR No. 20's requirements and applies these to light vehicles. GTR No. 20 also has safety requirements for the REESS beyond those in FMVSS No. 305. These additional requirements in GTR No. 20 for the REESS include:

- Safe operation of REESS under the following exposures during normal vehicle operations:
  - REESS protection under external fault conditions and extreme operating temperatures:

—External short circuit
—Overcharge
—Over-discharge

[17] Normal vehicle operation includes operating modes and conditions that can reasonably be encountered during typical operation of the vehicle, such as driving, parking, and standing in traffic, as well as charging using chargers that are compatible with the specific charging ports installed on the vehicle. It does not include conditions where the vehicle is damaged, either by a crash or road debris, subjected to fire or water submersion, or in a state where service and/or maintenance is needed or being performed.

[18] VAC—volts of alternating current; VDC—volts of direct current.

[19] 49 U.S.C. 30111.

[20] In Appendix B to this preamble, NHTSA requests comments on some issues under development in Phase 2.

—Overcurrent
—High operating temperature
—Low operating temperature
- Management of REESS emitted gases
- Water exposure during vehicle washing and driving through 10-centimeter (cm) deep water on roadway.
- Thermal shock and cycling (−40 °C to 60 °C) * [21]
- Resistance to short duration external gasoline pool fire *
- Vibration environment during normal vehicle operations *

- Warning systems for REESS safe operation in case of:
  - Low energy content in REESS * [22]
  - REESS control operational failure
  - Thermal runaway propagation due to single cell short circuit in REESS
  - Thermal event in REESS
- Installation (location) of REESS on the vehicle [23]

This NPRM proposes to complete the alignment of FMVSS No. 305 with GTR No. 20 by extending the standard's electrical safety requirements to heavy vehicles. This NPRM also proposes to adopt the above requirements for the REESS to light and heavy vehicles, except as noted by an asterisk, because requirements for thermal shock and cycling, resistance to short duration external pool fire, and vibration environment are already included under United States Hazardous Materials Regulations (HMR), 49 CFR parts 171 to 180, in accordance with the international lithium battery transportation requirements of UN 38.3, ''Transport of dangerous goods: Manual of tests and criteria.'' To avoid redundancy, NHTSA is not proposing adding these requirements into FMVSS No. 305a. NHTSA explains the bases for the proposals and, for provisions not proposed, the reasons the agency has not proposed them in this NPRM.

GTR No. 20 includes post-crash requirements but does not specify the crash tests for post-crash evaluation. Instead, the GTR allows contracting parties to apply the crash tests in their regulations. Further, the GTR allows contracting parties to permit regulated entities to comply with post-crash requirements without conducting vehicle crash tests. In place of crash tests, a contracting party may specify tests for ''mechanical integrity'' and ''mechanical shock'' of the REESS. The mechanical integrity test uses a quasi-static load of 100 kN on the REESS to evaluate the safety performance of the REESS under contact loads that may occur during vehicle crash. The mechanical shock test accelerates the REESS on a sled system to evaluate the safety performance of the REESS and the integrity of the REESS mounting structures to the vehicle under inertial loads that may occur. NHTSA discusses its assessment of the component level mechanical integrity and mechanical shock test procedures and requests comment on these issues later in this NPRM.

III. Proposals Based on GTR No. 20

a. Expanding Applicability of FMVSS No. 305a to Heavy Vehicles

NHTSA proposes to harmonize the application of FMVSS No. 305a with GTR No. 20. Currently, FMVSS No. 305 applies to electric-powered vehicles with a GVWR less than or equal to 4,536 kg (10,000 lb); it does not apply to electric vehicles with a GVWR greater than 4,536 kg (10,000 lb). GTR No. 20 applies to both light and heavy electric vehicles. NHTSA proposes to apply FMVSS No. 305a to both light and heavy electric vehicles. The fundamentals for protecting against an electrical shock for light vehicles are the same as for heavy vehicles. A failure of a high voltage system may cause injurious electric shock to the human body.

Specifically, NHTSA proposes to apply FMVSS No. 305a to all passenger cars, multipurpose passenger vehicles, trucks, and buses, regardless of their GVWR, that use electrical propulsion components with working voltages greater than or equal to 60 VDC or 30 VAC, and whose speed attainable over a distance of 1.6 kilometers (km) (1 mile) on a paved level surface is more than 40 km/h (25 miles per hour (mph)).[24] The NPRM proposes to carry over the current requirements for light vehicles in FMVSS No. 305 to FMVSS No. 305a, except some provisions as enhanced by this NPRM if adopted by a final rule. To sum, light vehicles would have to meet the requirements for normal vehicle operations and the requirements proposed in this NPRM for the REESS. Further, they would have to meet requirements for post-crash protections following a crash test. Under proposed FMVSS No. 305a, heavy school buses would have to meet the requirements for normal vehicle operations and for the REESS, and, following a specific crash test, requirements for post-crash protections. The agency is not adopting the provision in GTR No. 20 that conducts mechanical integrity and mechanical shock tests (component-level) for light vehicles and for heavy school buses. NHTSA believes that post-crash safety is better evaluated at a system level in a crash test than in component-level tests. Currently there are crash tests for light vehicles and school buses, thus, NHTSA proposes to conduct post-crash safety after the specified crash tests.

Heavy vehicles other than heavy school buses would be subject to the requirements for normal vehicle operations described above and the requirements for the REESS. They would not be subject to crash testing requirements because the agency does not know of a crash test that would be appropriate for the vehicles at this time. However, while NHTSA does not have a sufficient basis to proceed currently with dynamic or quasi-static requirements for heavy vehicles other than school buses, this NPRM requests comment on this issue. NHTSA is interested in the merits of component-level tests that are representative of impact loads in heavy vehicle crashes and the appropriateness of applying the tests to different weight classes of heavy vehicles. Even in the absence of post-crash testing requirements, NHTSA tentatively concludes that meeting requirements for normal vehicle operations and for the REESS, as a starting point, will enhance the safety of these heavy electric vehicles.

1. Heavy School Buses

NHTSA proposes to distinguish heavy school buses from other types of heavy vehicles and subject them to crash testing because the school vehicles will be carrying children. This NPRM proposes to assess the post-crash safety of heavy school buses (school buses with a GVWR greater than 4,536 kg (10,000 lb)) in a dynamic moving contoured barrier test. This proposal would be consistent with current school bus safety standards. FMVSS No. 301, ''Fuel system integrity,'' and FMVSS No. 303, ''Fuel system integrity of compressed natural gas vehicles,'' require heavy school buses using

[21] The asterisk notes that this NPRM is not proposing to adopt the GTR No. 20 requirement.

[22] This NPRM does not propose to require a warning for low energy in REESS. There is no such warning requirement for conventional fuel vehicles in the event of low-fuel, yet all conventional fuel vehicles have a low fuel indicator because it is a consumer convenience feature. The agency expects that, similarly, a low energy in REESS indicator will be voluntarily provided in all electric-powered vehicles.

[23] This requirement is intended for countries with type approval systems where a generic REESS can be approved separate from the vehicle. A vehicle with a pre-approved REESS that complies with the REESS installation requirement would not have to undergo post-crash safety assessment for approval. This installation requirement would not apply in the U.S. with a self-certification system.

[24] Current FMVSS No. 305 does not apply to these vehicles that travel under 40 km/h (25 mph).

conventional fuel or compressed natural gas for propulsion, respectively, to maintain fuel system integrity in a crash test where a moving contoured barrier traveling at any speed up to 48 km/h (30 mph) impacts the school bus at any point and angle. These standards set this high level of safety for heavy school buses even though FMVSS Nos. 301 and 303 do not apply to other types of heavy vehicles.

NHTSA recognizes that FMVSS No. 305 currently does not apply to nor has a crash test requirement for heavy school buses. When FMVSS No. 305 was first promulgated in September 2000, NHTSA decided not to apply proposed FMVSS No. 305 to heavy school buses. NHTSA made this decision after agreeing with commenters that applying the standard to the vehicles at that time could have substantial effect, in terms of cost and weight, on heavy school buses and potentially restrict further development.[25] The prevailing technology at that time was a series of conventional lead-acid batteries as the energy source for propulsion. Since the 1990s and early 2000s, battery technology and electric powertrains have evolved to include nickel metal hydride and lithium-ion batteries for electric vehicles. The weight and cost concerns raised for electric school buses in 2000 are no longer obstacles with current lithium-ion battery technologies because of their high energy density and their widespread use. Several school bus manufacturers are currently manufacturing and offering for sale heavy school buses with high voltage electric propulsion systems. Given the development of the technology and practicability of designing and producing heavy electric school buses, NHTSA tentatively concludes it is appropriate to adopt requirements to ensure post-crash safety of heavy electric school buses and maintain the current high level of safety of heavy school buses.

NHTSA is proposing to include in FMVSS No. 305a a requirement that heavy school buses with high voltage electric propulsion systems meet the requirements for normal vehicle operations (assessed prior to a crash test) and the proposed post-crash electrical safety requirements when impacted by the moving contoured barrier specified in FMVSS No. 301. The crash test requirement would align FMVSS No. 305a's requirements for heavy school buses with those of FMVSS Nos. 301 and 303. Due to the number of electric school bus manufacturers and sales since 2000, NHTSA tentatively concludes that meeting the proposed standard would have no substantial effect on cost and weight due to widespread use of lithium-ion battery and conformance to the proposed post-crash safety requirements.[26]

2. Heavy Vehicles Other Than School Buses

There are currently no heavy vehicle crash tests in FMVSS. Heavy vehicles are typically made to order with different configurations [27] based on the operational needs of the purchaser and are produced in low volume. Conducting crash tests of various design configurations from a small volume of representative vehicles would be cost prohibitive. There could also be practicability constraints for conducting crash tests on higher weight classes of heavy vehicles.

In this NPRM, NHTSA has proposed requirements to ensure post-crash safety using full vehicle crash tests for light vehicles and heavy school buses. Such full vehicle crash tests evaluate post-crash safety at a system level, so NHTSA is not considering component-level tests of the REESS for those vehicles. However, since there are no full vehicle crash tests currently in FMVSSs for heavy vehicles (other than heavy school buses), NHTSA seeks comment on considerations for component-level tests (other than the mechanical integrity and mechanical shock tests in GTR No. 20) that are representative of impact loads in heavy vehicle crashes and that can be applied to different weight classes of heavy vehicles.

i. Request for Comment; Mechanical Integrity Test

There are currently no crash tests specified in the FMVSSs [28] for evaluating the integrity of the fuel system or propulsion system of heavy vehicles other than heavy school buses. GTR No. 20 provides an option for evaluating post-crash safety of light vehicles by way of a mechanical integrity test (crush test) of the REESS as an item of vehicle equipment, instead of a full vehicle crash test as in FMVSS No. 305. The loads in the mechanical integrity requirements in the GTR No. 20 were derived from REESS contact loads measured in light passenger vehicle crash tests per UN Regulations ECE R. No. 12, ''Uniform provisions concerning the approval of vehicles with regard to the protection of the driver against the steering mechanism in the event of impact,'' ECE R.94, ''Uniform provisions concerning the approval of vehicles with regard to the protection of the occupants in the event of a frontal collision,'' and ECE R.95, ''Uniform provisions concerning the approval of vehicles with regard to the protection of occupants in the event of a lateral collision,'' using electric and hybrid-electric vehicles available on the market.

In the mechanical integrity test, a quasi-static load is applied to the charged REESS [29] along with any subsystem components (including crush protection systems specified by the manufacturer) along the longitudinal axis of the vehicle (along the direction of vehicle travel) or the lateral axis (perpendicular to the longitudinal axis). A peak load of 100 kN is applied within 3 minutes and maintained for at least 100 milliseconds. During the integrity test, the REESS is required to have no evidence of electrolyte leakage, fire, or explosion. The REESS is required to have electric isolation of at least 100 ohms/volt or provide protection level IPXXB against direct contact of high voltage sources.[30]

Because there are no full vehicle crash tests currently in FMVSSs for heavy vehicles (other than heavy school buses), NHTSA seeks comment on a mechanical integrity test for REESS on heavy vehicles to evaluate post-crash safety at a component-level. As noted above, the current quasi-static loads of the integrity test specified in GTR No. 20 are specific to light vehicles. NHTSA seeks comment on the parameters for a

[25] Final rule, 65 FR 57980, September 27, 2000.

[26] Currently, all major school bus manufacturers (Blue Bird, IC Bus, Thomas Built) are offering large and small electric school buses (see AFDC-electric school bus) and many school districts have introduced electric powered school buses in their fleets. As of June 2023, there are 2,277 electric school buses that are either on order, delivered or operating in the U.S. In total, there are now 5,982 committed electric school buses in the U.S. *https://www.wri.org/insights/where-electric-school-buses-us#:~:text=As%20of%20June%202023%2C%20there,more%20buses%20since%20June%202022*.

[27] These differences include the number of fuel containers and battery packs and the location and attachment of fuel lines and fuel containers.

[28] FMVSS No. 301, ''Fuel system integrity,'' and FMVSS No. 303, ''Fuel system integrity of compressed natural gas vehicles,'' only applies to light vehicles and to heavy school buses.

[29] The REESS is charged to 95 percent state-of-charge for REESS designed to be externally charged and charged to no less than 90 percent of state-of-charge for REESS designed to be charged only by an energy source on the vehicle.

[30] IPXXB and IPXXD ''protection levels'' refer to the ability of the physical barriers to prevent entrance of a probe into the enclosure, to ensure no direct contact with high voltage sources. ''IPXXB'' is a probe representing a small human finger. ''IPXXD'' is a slender wire probe. Protection degrees IPXXD and IPXXB are International Electrotechnical Commission specifications for protection from direct contact of high voltage sources.

possible quasi-static crush test for the REESS on heavy vehicles.[31] The agency requests feedback on the merits of the integrity test in assessing post-crash safety for heavy vehicle REESS. NHTSA seeks comment on the practicability of such a test and on the specifics of subsystem components that should be included with the REESS while conducting the crush test. NHTSA requests that commenters provide data to substantiate their assertions.

ii. Request for Comment; Mechanical Shock Test

NHTSA seeks comment to inform our research on a mechanical shock test for REESS on heavy vehicles to evaluate post-crash safety at a component level. The aim of the mechanical shock requirement in GTR No. 20 is to verify the safety performance of the REESS under inertial loads which may occur during an impact. The requirement evaluates specifically the performance of the REESS mountings and fixtures to the vehicle.

The mechanical shock test is conducted with the REESS along with any subsystem components installed on a sled system using the mounting structures that are used for installing the REESS to the vehicle. The REESS is decelerated or accelerated with an acceleration profile within the acceleration corridor in Figure 1 and in accordance with acceleration magnitudes in Table 1 through Table 3 for different vehicle GVWRs. The test concludes with an observation period of one hour at the ambient temperature conditions of the test environment.

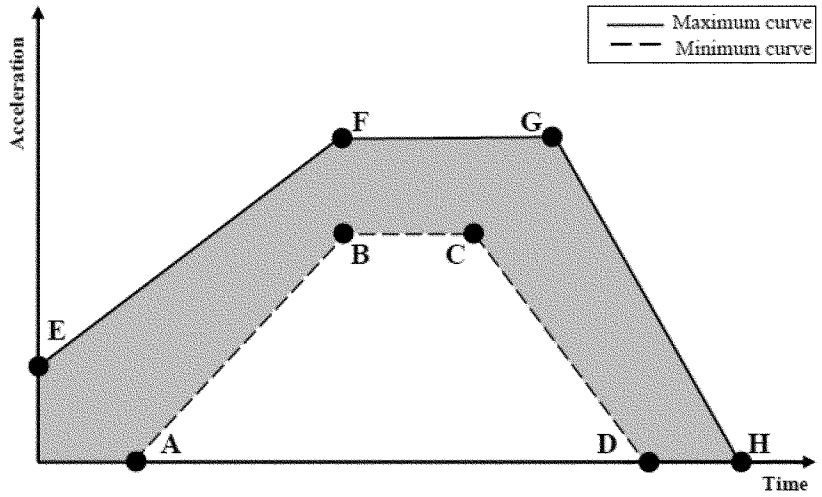


Figure 1—Generic Description of Test Pulses—Mechanical Shock Test

TABLE 1—MECHANICAL SHOCK TEST—ACCELERATION VALUES FOR VEHICLES WITH A GVWR LESS THAN OR EQUAL TO 3,500 kg (7,716 lbs)

Point	Time (ms)	Acceleration (g)	
		Longitudinal	Transverse
A	20	0	0
B	50	20	8
C	65	20	8
D	100	0	0
E	0	10	4.5
F	50	28	15
G	80	28	15
H	120	0	0

TABLE 2—MECHANICAL SHOCK TEST—ACCELERATION VALUES FOR VEHICLES WITH A GVWR GREATER THAN 3,500 kg (7,716 lbs) AND LESS THAN OR EQUAL TO 12,000 kg (26,455 lbs)

Point	Time (ms)	Acceleration (g)	
		Longitudinal	Transverse
A	20	0	0
B	50	10	5
C	65	10	5
D	100	0	0

[31] NHTSA's research evaluated the crush resistance of REESS using a displacement-based loading method. See Ford Safety Performance of Rechargeable Energy Storage Systems, Appendix A, DOT HS 812 756, July 2019. *https://rosap.ntl.bts.gov/view/dot/41840.*

TABLE 2—MECHANICAL SHOCK TEST—ACCELERATION VALUES FOR VEHICLES WITH A GVWR GREATER THAN 3,500 kg (7,716 lbs) AND LESS THAN OR EQUAL TO 12,000 kg (26,455 lbs)—Continued

Point	Time (ms)	Acceleration (g)	
		Longitudinal	Transverse
E	0	5	2.5
F	50	17	10
G	80	17	10
H	120	0	0

TABLE 3—MECHANICAL SHOCK TEST—ACCELERATION VALUES FOR VEHICLES WITH A GVWR GREATER THAN 12,000 kg (26,455 lbs)

Point	Time (ms)	Acceleration (g)	
		Longitudinal	Transverse
A	20	0	0
B	50	6.6	5
C	65	6.6	5
D	100	0	0
E	0	4	2.5
F	50	12	10
G	80	12	10
H	120	0	0

During the mechanical shock test, the REESS is required to have no evidence of electrolyte leakage, fire, or explosion. The REESS is required to have electric isolation of at least 100 ohms/volt or have protection degree IPXXB.

Since there are no full vehicle crash tests currently in FMVSSs for heavy vehicles (other than heavy school buses) to evaluate post-crash safety at a system level, NHTSA seeks comment to inform possible future research on a mechanical shock test for REESS on heavy vehicles to evaluate post-crash safety at a component level. Among other matters, NHTSA requests comment on the following apparent limitations of the GTR test. The mechanical shock test in GTR No. 20 aims primarily at evaluating the safety performance of the REESS mounting fixture, which does not appear to address a safety need presently observed in the field.[32] Furthermore, the accelerations captured in the GTR No. 20 for the mechanical shock requirement may be too low, according to a technical study performed by the Transportation Research Laboratory.[33] The aim of the technical study was to review the appropriateness of the crash pulses used in current European regulations. This study determined that the crash pulse requirements in a number of the EU regulations (including R67, R100, and R110) are not representative of current vehicles. (These are among the reasons NHTSA is not proposing the mechanical shock test in GTR No. 20 for heavy vehicles in this NPRM.)

NHTSA seeks comment on the relevance of the mechanical shock test for heavy vehicles. NHTSA seeks comment on how the mechanical shock test would be performed on heavy vehicle REESSs, the appropriate accelerations levels that would be representative of acceleration levels observed in the field or in crash tests, and appropriate requirements which the REESS would need to meet in a mechanical shock test.

NHTSA seeks comment on the best approach or test method for evaluating post-crash safety for electric vehicles with a GVWR greater than 4,536 kg (10,000 lb). Specifically, NHTSA seeks comment and recommendations on other applicable safety tests and corresponding objective performance criteria to evaluate the propulsion system crash safety performance of vehicles with a GVWR greater than 4,536 kg (10,000 lb). NHTSA seeks comment on whether the moving contoured barrier crash test proposed for heavy school buses in the above section in this preamble can or should be applied to all heavy vehicles.

b. General Specifications Relating To Crash Testing

This NPRM proposes several general provisions from GTR No. 20 that would apply to various testing and performance requirements. NHTSA highlights the following proposals below. These provisions pertain to light vehicles and heavy school buses subject to the crash testing requirements of proposed FMVSS No. 305a.

1. Low Energy Option for Capacitors

Currently, FMVSS No. 305 S5.3 requires that vehicles meet one of the following three criteria post-crash: electrical isolation; absence of high voltage; or physical barrier protection. This NPRM proposes a low energy option for capacitors in the electric powertrain in FMVSS No. 305a.

Capacitors store electrical energy and may be connected directly to the chassis in some electric power trains. In fuel cell electric vehicles (FCEVs), the high-voltage systems may contain capacitors that are connected to high voltage buses and are not electrically isolated. Such capacitors may be high voltage sources post-crash (because a charged capacitor may not discharge quickly) and may not be able to comply with post-crash electrical safety requirements using the direct and indirect contact protection option or the electrical isolation. However, capacitors may not pose a safety hazard when contacted, even though they may be high voltage sources post-crash, because they are low energy high voltage sources.

[32] Under the Vehicle Safety Act, the FMVSSs must, among other things, be practicable, meet the need for motor vehicle safety, and be stated in objective terms. (49 U.S.C. 30111(a).)

[33] European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Edwards, M., Hylands, N., Grubor, D., et al., *Technical study to review the appropriateness of crash pulses used in current EU legislation: final report,* Section 4.4, Publications Office, 2021, *https://data.europa.eu/doi/10.2873/58935.*

NHTSA has previously considered this issue. In a 2007 NPRM responding to petitions for rulemaking from what were then the Alliance of Automobile Manufacturers (Alliance) and the Association of International Automobile Manufacturers (AIAM),[34] NHTSA sought comments regarding a request of the petitioners to include 0.2 Joule (J) as an appropriate low energy threshold for electrical safety compliance post-crash for high voltage sources.[35] The petitioners believed that the low energy option was non-harmful, and argued in their subsequent comments to the NPRM[36] that the option is necessary due to the presence of x- and y-capacitors in the powertrain of fuel cell vehicles. After evaluating the comments, NHTSA ultimately disagreed with the petitioners and decided against a low energy option for post-crash electrical safety because the agency was not convinced that a low energy option was needed and had concerns about the possible disparity between the level of safety provided by 0.2 J of energy and the electrical isolation requirement.[37] At that time a safety need for a low energy option was not yet clear and the agency expressed concerns regarding the practicality of measuring the residual energy in a crash test environment.

NHTSA is reconsidering this issue in this NPRM. GTR No. 20 contains a detailed analysis of the 0.2 Joules energy limit for the low energy post-crash electrical safety compliance option. While the 2007 NPRM considered a low energy post-crash electrical safety compliance option for any high voltage source in the powertrain, GTR No. 20 only provides this option to capacitors in the powertrain.

NHTSA conducted an analysis using human body resistance charts, long and short duration capacitance discharge pulse profiles, and the graphs of physiological effects of AC and DC body current by duration of exposure from two International Electrotechnical Commission (IEC) technical publications,[38] to determine safe energy levels for the human body. NHTSA has submitted a technical memorandum to the docket for this NPRM that provides details and results of the agency's analysis.

Based on the analysis results, NHTSA tentatively concludes that a post-crash electrical safety compliance option for capacitors based on an electrical energy of 0.2 Joules or less provides adequate safety from electrical shock and long-term harmful effects on the human body. Providing this post-crash compliance option would allow for practicable powertrain designs for battery electric and fuel cell vehicles without any reduction in safety. Automotive high-voltage systems typically utilize a number of capacitors connected to high voltage buses, and it is not always practical to discharge every capacitor post-crash. NHTSA tentatively believes that by providing this compliance option for a safe energy limit, vehicle manufacturers would have the flexibility to design products that assure safety. NHTSA seeks comments on the parameters (human body resistance, discharge profiles) used in the analysis and the analysis method.

2. Assessing Fire or Explosion in Vehicle Post-Crash Test

After a real-world crash, passengers within the vehicle need time to safely egress from the vehicle or be rescued by first responders. During this time, passengers should not be exposed to hazards such as fire or explosion of the REESS, which may hinder their egress or rescue.

GTR No. 20 requires that for a period of one hour after a crash test, there shall be no evidence of fire or explosion of the REESS. However, such a requirement is not currently in FMVSS No. 305. In accordance with GTR No. 20, NHTSA proposes to include in FMVSS No. 305a a requirement that there be no evidence of fire or explosion for the duration of one hour after the crash test for heavy school buses, and for the duration of one hour after each crash test and subsequent quasi-static rollover test for light vehicles. The assessment of fire or explosion would be verified by inspection without removal of the REESS or any parts of the vehicle.

3. Assessing Post-Crash Voltage Measurements

This NPRM proposes to clear up a source of ambiguity in FMVSS No. 305. FMVSS No. 305 requires that the post-crash voltage measurements be made at least 5 seconds after the vehicle comes to rest. However, at times it is not entirely clear when the vehicle comes to rest because there is always some vibration and slight vehicle motion post-crash. For consistency with the GTR No. 20 test procedure, NHTSA proposes that the voltage measurements in FMVSS No. 305a would be made between 10 seconds and 60 seconds after the impact. The agency tentatively believes that 10 seconds after impact is sufficient time for voltage measurement and 60 seconds after impact is early enough that any high voltage arcing would be detected. NHTSA seeks comment on this approach.

4. Electrolyte Spillage Versus Leakage

Currently, FMVSS No. 305 S5.1 addresses ''electrolyte spillage from propulsion batteries.'' The standard specifies that following a crash test, not more than 5.0 liters of electrolyte from propulsion batteries shall spill outside the passenger compartment, and that no visible trace of electrolyte shall spill into the passenger compartment. NHTSA proposes to use terms related to ''leakage'' instead of spillage. When the electrolyte spillage[39] requirement was originally adopted in 2000, EV propulsion batteries were envisioned to be a series of lead-acid batteries. Lead-acid batteries at the time had large quantities of liquid electrolyte that could spill out of the battery if the battery structure were compromised in a crash. At that time, it was appropriate to eliminate the term ''leakage'' due to its synonymity to ''spillage,'' to avoid questions of whether different meanings were intended by the different words.

Current EV propulsion batteries, however, are lithium-ion batteries. The cells of lithium-ion batteries have small quantity of electrolyte that could leak out of the battery casing rather than spill. Thus, NHTSA proposes to use the term ''electrolyte leakage,'' which is more relevant than ''electrolyte spillage'' for these batteries.

NHTSA seeks comment on the inclusion of a post-crash electrolyte leakage requirement in FMVSS No. 305a and the necessity and relevance of such a requirement for current EVs. Specifically, NHTSA seeks comment on whether this requirement is still relevant given today's propulsion battery technologies and if it is still necessary based on the safety incidents observed in the field or in crash tests. NHTSA seeks comment on whether a 5-liter maximum amount of electrolyte permitted to be leaked is still relevant and requests commenters to provide data based on safety incidents observed in the field or in crash tests to

[34] In January 2020, the two industry associations merged to form the Alliance for Automotive Innovation (generally referred to as the Auto Innovators).

[35] 72 FR 57260, October 9, 2007.

[36] NHTSA–2007–28517–0004.

[37] Final rule, 75 FR 33515, 33519; June 14, 2010.

[38] IEC 60479–1 and 60479–2 Effects of Current on Human Beings and Livestock—Part 1: General Aspects, Part 2: Special Aspects, 2005–07, Reference Nos. CEI/IEC/TS 60479–1:2018 and CEI/IEC/TS 60479–2:2019. *https://webstore.iec.ch/publication/62980; https://webstore.iec.ch/publication/63392* (last accessed September 26, 2023).

[39] Per Section B, ''S5.1 Electrolyte Spillage from Propulsion Batteries,'' NHTSA stated in 65 FR 57980 that ''leakage'' is synonymous for ''spillage.'' Both words indicate the escape of electrolyte from the battery.

substantiate their assertions.[40] NHTSA seeks comment on and recommendations regarding electrolyte leakage detection methods and how these detection methods can discern between the presence of electrolyte and the presence of other liquids such as coolant.

c. REESS Requirements Applicable to All Vehicles

This section of the NPRM addresses REESS safety performance requirements during normal vehicle operation. The REESS requirements would apply to all vehicles subject to FMVSS No. 305a.

Introduction

Currently, FMVSS No. 305 does not have any requirements for the safe operation of the REESS and for mitigating risks of fire and other safety risks associated with it. This NPRM's proposed requirements would protect the REESS against external fault inputs, ensure the REESS operations are within the manufacturer-specified functional range, provide protection from thermal propagation in the event of single-cell thermal runaway (SCTR) due to an internal short-circuit, provide a warning if there is a thermal event within the REESS or a malfunction of vehicle controls that manage REESS safe operation, and ensure safe REESS operation during and after water exposure.

While REESS is a general term to represent any rechargeable electrical energy storage system, currently all electric powered vehicles use REESS with lithium-ion chemistry. Therefore, the current safety hazards associated with REESS identified in literature and in the field are those specific to lithium-ion chemistry REESS. However, the proposed requirements in this NPRM will apply regardless of REESS chemistry.

REESSs are designed and manufactured to operate safely within a range of operating parameters, including temperature ranges, charge levels, and current levels. If the REESS is subjected to fault conditions outside these operating ranges such as overcharge, over-discharge, overcurrent, over-temperature, external short-circuit, or low temperature, these conditions can result in damage to the cells. Cell damage increases the risk of hazardous conditions such as electrolyte leakage, reduced electrical isolation, and fire in the REESS (thermal runaway). Manufacturers include controls in electric vehicles to manage REESS operation to ensure they stay within the specified safe operating range, thereby mitigating damage to the REESS. The system that monitors and controls the REESS is referred to as the battery management system (BMS). NHTSA proposes requirements to assure that the BMS has controls that protect the REESS against these faults by, *e.g.,* stopping the vehicle from charging to prevent overcharge.

Performance Criteria For Normal Vehicle Operations—General

The performance criteria specified in GTR No. 20 for each of the vehicle control performance tests specify no evidence of electrolyte leakage, rupture (applicable to high voltage REESSs only), venting (applicable to REESSs other than open-type traction batteries[41]), fire, or explosion. For high voltage REESSs, the electrical isolation is required to be greater than or equal to 100 ohms per volt, for a DC high voltage source. This NPRM proposes the same performance criteria to protect the REESS against external faults, such as a fault in an external charger that could result in the charger supplying greater current than requested by the vehicle and/or charging the REESS beyond full state of charge.[42]

Under proposed FMVSS No. 305a, the evidence of electrolyte leakage, venting,[43] or rupture is verified by visual inspection without disassembly of any part of the vehicle. Visible smoke during and after the test, and/or the presence of soot and/or electrolyte residue in post-test visual inspection are indicators of venting and electrolyte leakage. The overcharge, over-discharge, overcurrent, over-temperature, and external short-circuit test procedures specify that the agency would perform a standard cycle after completing exposure to each of the external faults, provided that the vehicle permits charging and discharging at that time. A standard cycle, as specified in GTR No. 20 and proposed FMVSS No. 305a, consists of a standard discharge and followed by a standard charge. If the vehicle is operable after exposure to the external fault, running the standard cycle after exposure to the external fault condition—while observing the vehicle for one hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion, followed by voltage measurements for determining electrical isolation—would ensure that continuing operating the vehicle would not result in safety hazards.

The vehicle might not permit charging and discharging after detecting a dangerous condition; NHTSA considers this a safety feature and that such a test outcome would not amount to an apparent noncompliance. The inability to perform a standard cycle after exposure to the external fault does not terminate the test. If the vehicle does not permit charging and discharging after exposure to an external fault, then the standard cycle is simply not performed and the test proceeds. Specifically, the test ends with the vehicle observed for one hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion, followed by voltage measurements for determining electrical isolation.

The standard cycle would be conducted with the breakout harness connected to the manufacturer-specified location(s) on the traction side of the REESS[44] on the vehicle's electric power train. The REESS is charged and discharged using a high voltage battery tester/cycler (with appropriate power and voltage ranges) which is connected to the vehicle through the breakout harness, as shown in Figure 2 below (for illustration purposes only).

[40] GTR No. 20 requires that the electrolyte leaking from the REESS during and after the crash test is no more than 7 percent by volume of the REESS electrolyte. However, there is no practical way of measuring the quantity by volume of the electrolyte in the REESS.

[41] Open-type traction batteries are a type of battery which are filled with liquid and generate hydrogen gas that is released into the atmosphere.

[42] The control pilot pin of the charger communicates with the vehicle during charging. Based on the state of charge (SOC), the vehicle requests a certain level of current and the vehicle charger provides that level. Other external faults could arise when attempting to drive the vehicle beyond the lowest safe operating SOC of the REESS (over-discharge of the REESS), driving fast up a steep hill for a long period of time that could cause the REESS to heat beyond its highest safe operating temperature, and charging a REESS at very cold temperatures that could cause lithium plating.

[43] NHTSA elaborates on the proposed venting requirement at the end of this section.

[44] The manufacturer is required by proposed FMVSS No. 305a to specify the location for connecting the breakout harness and may also provide appropriate breakout harnesses for testing the vehicle. If the manufacturer does not provide a breakout harness, NHTSA would use a generic breakout harness to connect to the traction side of the REESS.

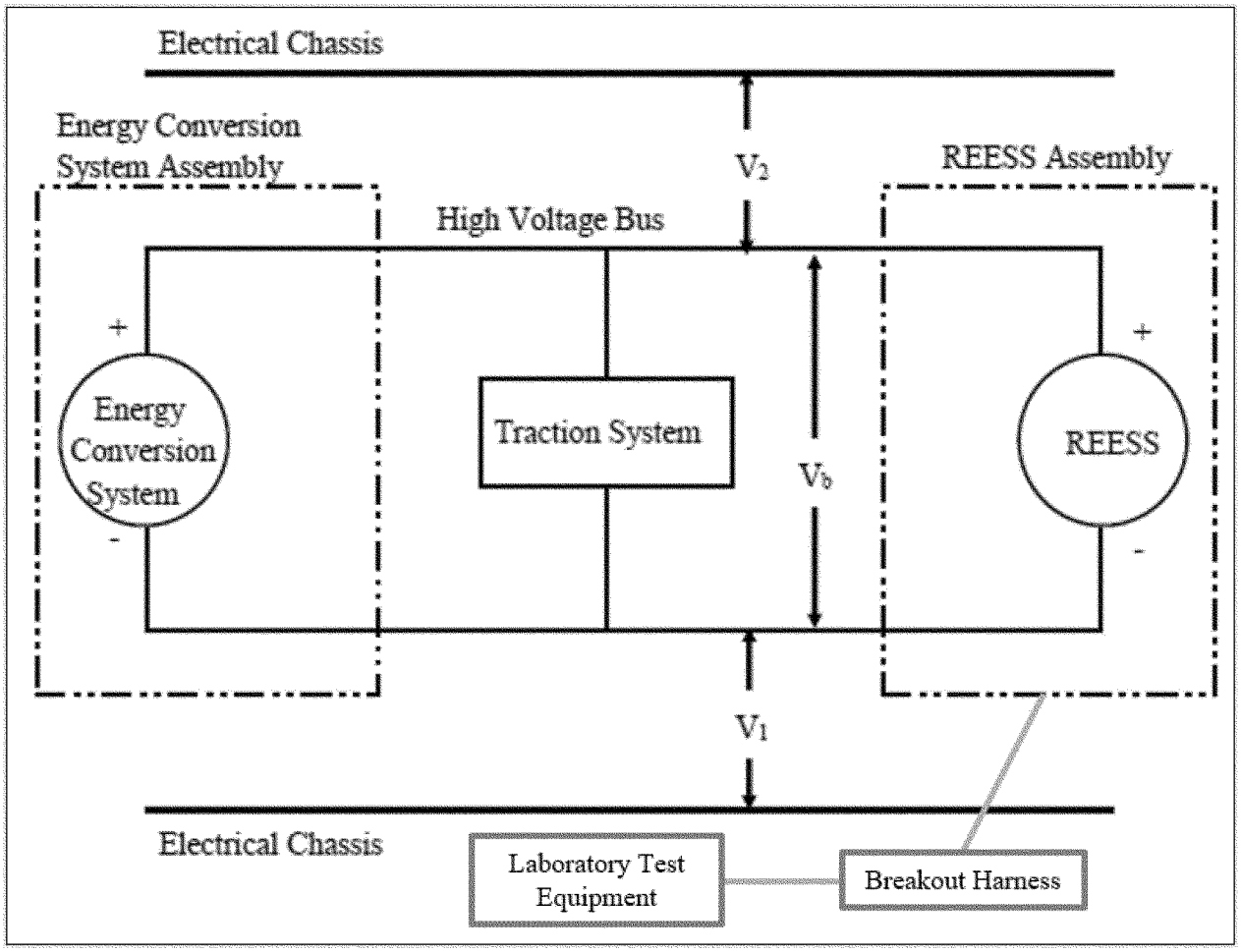


Figure 2—Connection of the Breakout Harness & Laboratory Test Equipment to the Vehicle

NHTSA proposes that the discharge and charge rates for the standard cycle would be provided by the vehicle manufacturer. NHTSA proposes that, if the discharge rate is not specified by the manufacturer, NHTSA would use a discharge rate (C-Rate) of 1C current. A ''nC Rate'' is the magnitude of constant current that would charge or discharge the REESS in 1/n hour between 0 percent state of charge (SOC) and 100 percent SOC. Discharge would continue until automatically terminated by vehicle controls at the manufacturer-specified minimum operating SOC of the REESS. After discharge, the standard cycle would include a 15-minute rest period before the charging procedure commences. If a charge procedure is not specified, then a charge rate (*i.e.,* C-Rate) of ⅓C current would be used. Charging is continued until automatically terminated by vehicle controls at the manufacturer-specified maximum operating SOC of the REESS.

REESS Venting

Venting is the release of excessive internal pressure from a cell or REESS in a manner intended by design to preclude rupture or explosion. Venting during normal vehicle use may be associated with (a) combustion and/or decomposition of electrolyte, or (b) vaporization of the electrolyte. In case of condition (a), the emissions from the cells may increase the risk to vehicle occupants if they are exposed to such substances. In case of condition (b), the amount of the gases released is considered less likely to pose a safety risk to the occupants. Venting in the case of condition (a) may result in the release of gases and particulates from the REESS, thereby potentially exposing vehicle occupants to the emissions (gases and particulate matter).[45] Hazards associated with toxicity, corrosiveness, and flammability of the gases emitted from the REESS and associated human health exposure limits vary considerably. As noted above, NHTSA proposes to include a provision in FMVSS No. 305a to limit the safety risks to vehicle occupants due to venting during normal vehicle operations. The provision is based on GTR No. 20 requirements described below.

GTR No. 20 specifies that under normal vehicle operation, the vehicle occupants are not exposed to any hazardous environment caused by venting from the REESS. To avoid human harm that may occur due to potential toxic or corrosive emissions, GTR No. 20 specifies that there be no venting from the REESS for the following normal vehicle operations tests: vibration, thermal shock and cycling, external short circuit protection, overcharge protection, over-discharge protection, over-temperature protection and overcurrent protection. GTR No. 20 includes a no-fire requirement in these tests which addresses the issue of vented gas flammability. During the development of GTR No. 20, a robust and repeatable method to verify the occurrence of

[45] Gases generated in and vented from lithium-ion (Li-ion) batteries typically include carbon dioxide (CO_2), carbon monoxide (CO), hydrogen (H_2), oxygen (O_2), light C_1-C_5 hydrocarbons, *e.g.,* methane and ethane, and fluorine-containing compounds such as hydrogen fluoride (HF) and fluoro-organics, *e.g.,* ethyl-fluoride.

venting and the potential exposure of vehicle occupants to various gases from the venting was sought, but no suitable method was found. Visual inspection was found to be the best approach at this time for verifying the occurrence of venting for assessing the influence of vented gases on vehicle occupants. Therefore, GTR No. 20 specifies that evidence of venting in these tests is verified by visual inspection (evidence of soot, electrolyte residues) without disassembling any part of the REESS.

NHTSA proposes to use a similar approach in FMVSS No. 305a to evaluate the safety risks to vehicle occupants resulting from venting from the REESS. The agency acknowledges that research is needed to develop a repeatable, reproducible, and practical method to verify the occurrence of various vented gases and the potential exposure and harm to vehicle occupants. However, NHTSA tentatively concludes that in the absence of such a method, the requirement that there must be no fire, electrolyte leakage or venting during the tests evaluating vehicle controls for safe REESS operation (external short-circuit protection, overcharge protection, over-discharge protection, over-temperature, and overcurrent protection) would reduce some safety risks to vehicle occupants due to venting from the REESS. The evidence of venting in these tests would be verified by visual inspection (evidence of soot, electrolyte residues) without disassembling any part of the REESS.

NHTSA also requests comment in an Appendix to this preamble on the IWG's continuing work on venting in Phase 2 of the GTR.

1. Vehicle Controls for Safe REESS Operation

This NPRM proposes the following performance requirements and associated test procedures for vehicles to ensure they have controls managing safe REESS operations. There are some minor differences between the GTR No. 20 test procedures and those proposed in this NPRM that are based on the lessons learned from NHTSA's test program. Those differences pertain to the ease of conducting the test.[46]

NHTSA funded research to validate a collection of test procedures that assess safety hazards to electric vehicles while being charged or when the REESS exceeds its recommended operational limits.[47] [48] The research independently evaluated, refined, and validated vehicle-level test procedures that could be robustly applied to a wide range of vehicle technologies and battery configurations. Based on the results of NHTSA's research, the agency proposes to conduct full vehicle-level tests using a breakout harness connected to a battery tester/cycler [49] to evaluate vehicle controls for safe REESS operation, rather than conducting the tests on the REESS as a separate component. NHTSA is proposing vehicle-level testing because evaluating REESS safe operation at the vehicle level would evaluate the entire vehicle system and the associated vehicle controls, whereas conducting the tests at the equipment level would not evaluate all the relevant vehicle controls or any interaction or interference between vehicle controls.

NHTSA evaluated the GTR No. 20 test procedures for feasibility, practicability, and objectivity by conducting the test procedures on a 2019 Chevy Bolt, 2020 Tesla Model 3, and 2020 Nissan Leaf S Plus.[50] [51] [52] NHTSA's test program demonstrated the ease of conducting tests at a vehicle level using breakout harnesses connected to a battery cycler/tester for the external inputs to the REESS without having to remove the REESS from the vehicle to conduct component level tests. The proposed test procedures for overcharge, over-discharge, overcurrent, over-temperature, and external short-circuit tests are non-destructive tests intended to evaluate vehicle controls to protect the REESS and can be conducted in serial order on the same vehicle.

i. Overcharge Protection

A battery pack experiences an overcharge when a charger forces its state of charge (SOC) level to rise above 100 percent. Overcharge of a REESS can occur because of a failure of the charging system, such as a fault in an external charger, a fault in the vehicle's regenerative braking system, a sensor failure, or a voltage reference drift.[53] Overcharge can lead to swelling of an electrochemical cell, lithium plating, stability degradation, or over-heating, and ultimately can lead to thermal runaway.[54] Severe events such as fire or explosion may occur. Therefore, vehicle controls to ensure the REESS does not get overcharged are important for long-term safe operation of the REESS.

Vehicle level controls or the BMS typically prevent charging when the manufacturer-specified maximum operating SOC of the REESS is achieved. GTR No. 20 includes a test to evaluate the performance of vehicle controls to prevent overcharge of the REESS. NHTSA tentatively concludes that GTR No. 20's overcharge test is practical and feasible based on the agency's own testing.[55] NHTSA proposes to include the overcharge protection requirement and test procedure in FMVSS No. 305a.

The proposed overcharge test would be performed on a complete vehicle as follows. The test is conducted with the REESS initially set at 90 to 95 percent SOC [56] and at ambient temperatures between 10 °C and 30 °C. The breakout harness is attached on the traction side of the REESS at the vehicle manufacturer's recommended location(s) and attachment point(s), and the battery tester/cycler is connected to the breakout harnesses to supply the charge current. Temperature probes are connected to the REESS case to monitor changes in the REESS temperature. Temperature measurements may also be

[46] For example, the state of charge of the REESS at the beginning of the test differed in some instances from that in GTR No. 20 to enable completing the test more readily.

[47] DC Charging Safety Evaluation Procedure Development, Validation, And Assessment, and Preliminary AC Charging Evaluation Procedure—DOT HS 812 754 and DOT HS 812 778—July 2019. *https://rosap.ntl.bts.gov/view/dot/41933.*

[48] System-Level RESS Safety and Protection Test Procedure Development, Validation, and Assessment—Final Report—DOT HS 812 782 October 2019 *https://rosap.ntl.bts.gov/view/dot/42551.*

[49] A battery tester/cycler is equipment that can be used for charging and discharging REESS and for conducting specialized tests on the REESS. An example of a battery tester with hybrid and battery electric vehicles is the NHR 9300 battery test system (NHR 9300).

[50] NHTSA Test Report on the 2020 Tesla Model 3 Standard Range 4-Door Sedan can be accessed here: *https://downloads.regulations.gov/NHTSA-2021-0029-0003/attachment_2.pdf.*

[51] NHTSA Test Report on the 2020 Nissan Leaf S Plus (62kWh Battery) 5-Door Hatchback can be accessed here: *https://downloads.regulations.gov/NHTSA-2021-0029-0002/attachment_2.pdf.*

[52] NHTSA Test Report on the 2019 Chevy Bolt can be accessed here: *https://downloads.regulations.gov/NHTSA-2021-0029-0001/attachment_2.pdf.*

[53] Voltage can drift based on temperature. Higher temperature can result in lower voltage.

[54] Thermal runaway of a lithium-ion cell in a REESS occurs when the thermal stability limit of the cell chemistry is exceeded, and the cell releases its energy via an exothermic reaction at an uncontrolled rate such that the heat generated is faster than that dissipated.

[55] See Test reports in docket no. NHTSA–2021–0029, available at *www.regulations.gov.* Detailed test procedures are provided in the test reports of the 2021 Chevrolet Bolt (NHTSA–2021–0029–0001), 2020 Nissan Leaf (NHTSA–2021–0029–0002), and the 2020 Tesla Model 3 (NHTSA–2021–0029–0003).

[56] Ranges in temperature and SOC are provided for this and other test procedures for practicability and ease of conducting the tests. In the overcharge test, the REESS is initially set at a high SOC (90 to 95 percent) to enable fully charging the REESS in a shorter period of time.

obtained through communication with the REESS control module.[57]

The vehicle is turned on and the REESS is charged using the battery tester/cycler in accordance with the manufacturer's recommended maximum charge current [58] until one of the following has occurred:

(a) the REESS overcharge protection control terminates the charge current;

(b) the REESS temperature is 10 °C above its maximum operating temperature specified by the manufacturer; [59] or,

(c) 12 hours have passed since the start of charging the vehicle.

After the overcharge condition is terminated, a standard cycle is performed if possible. The test concludes with a 1-hour observation period in which the vehicle is observed for any evidence of electrolyte leakage, rupture, venting, fire, or explosion. At the conclusion of the post-test observation period, the electrical isolation is determined in the same manner as currently in FMVSS No. 305 S7.6 using a voltmeter to measure voltages.

ii. Over-Discharge Protection

Over-discharging a REESS, which means discharging it below its lowest state of charge specified by the manufacturer, can lead to undesirable aging, electrolyte leakage, swelling, solid electrolyte interphase (SEI) decomposition, internal short-circuit, and damaged cell stability and safety on subsequent recharges. Even though the initial over-discharge response of lithium-ion cells generally appears benign, it can cause damage to cell electrodes that can compromise cell stability and safety on subsequent recharge. Subsequent charging of an over-discharged REESS may lead to fire or explosion.

Vehicle controls or the BMS typically prevent over-discharging when the manufacturer specified minimum operating SOC of the REESS is achieved. GTR No. 20 includes a test to evaluate the performance of vehicle controls to prevent over-discharge of the REESS. NHTSA tentatively concludes that GTR No. 20's over-discharge test is practical and feasible based on the agency's own testing.[60] NHTSA proposes to include the over-discharge protection requirement and test procedure in FMVSS No. 305a.

The over-discharge test is performed at ambient temperatures between 10 °C and 30 °C on a complete vehicle. The SOC of the REESS at the beginning of the test is set at 10 to 15 percent.[61] For a vehicle with on-board energy conversion systems (*e.g.,* internal combustion engine, fuel cell, etc.), the fuel supply is set to the minimum level [62] where active driving mode is permitted. Similar to the overcharge test, the breakout harness is attached on the traction side of the REESS at the vehicle manufacturer's recommended location(s) and attachment point(s), and the battery tester/cycler is connected to the breakout harness to discharge the REESS.[63] Temperature probes are connected to the REESS case to monitor changes in the REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

The vehicle is turned on and the REESS is discharged using the battery tester/cycler in accordance with the manufacturer's recommended discharging rate [64] under normal operating conditions until one of the following has occurred:

(a) vehicle controls terminate the discharge current,

(b) the temperature gradient of the REESS is less than 4 °C [65] through two hours, or

(c) if the vehicle is discharged to 25 percent of its nominal voltage level.

At the conclusion of the discharge termination, one standard charge is performed, followed by one standard discharge. The test concludes with a 1-hour observation period in which the vehicle is observed for any evidence of electrolyte leakage, rupture, venting, fire, or explosion. At the conclusion of the observation period, the electrical isolation is determined in a similar manner as that in current FMVSS No. 305 S7.6 using a voltmeter to measure voltages.

iii. Overcurrent Protection

As noted earlier, the vehicle and the charging system communicate the level of current needed to charge the REESS. If there is a problem in the communication or if the charging system malfunctions, higher current may be provided though not requested by the vehicle. During direct current (DC) fast-charging, failure of the external charge equipment could cause over-current conditions in which the REESS receives higher current than it was designed to manage at a given state of charge of the REESS. Overcurrent conditions could result in heating of the REESS, electrochemical damage to the cells, and a risk of thermal runaway.

GTR No. 20 includes a test to evaluate the performance of vehicle controls to protect the REESS from overcurrent conditions. NHTSA tentatively concludes that GTR No. 20's overcurrent test is practical and feasible based on the agency's own testing.[66] NHTSA proposes to include the overcurrent protection requirement in FMVSS No. 305a. In accordance with GTR No. 20, NHTSA proposes to apply the overcurrent test to vehicles that have capability of charging by DC external electricity supply. The test is unnecessary for vehicles that only charge by alternating current (AC) supply because AC charging is slower and the inverters for AC charging manage any overcurrent. Also, overcurrent issues have not been observed in AC charging.

The overcurrent test is performed with a complete vehicle. To avoid the overcharge protection terminating the over-current condition, the SOC of the REESS is set between 40 to 50 percent. The test is conducted at ambient temperatures between 10 °C and 30 °C. The breakout harness is attached on the traction side of the REESS at the vehicle manufacturer's recommended location(s) and attachment point(s), and the battery tester/cycler is connected to the breakout harnesses to supply the charge current. Temperature probes are connected to the REESS case to monitor changes in the REESS temperature.

[57] Commercial diagnostic tools or tools supplied by the manufacturer may be used to read the Temperature measurements within the REESS from the vehicle's Controller Area Network (CAN bus).

[58] If the manufacturer does not provide an appropriate charge current, then a charge rate (*i.e.,* C-Rate) of C/3 current would be used.

[59] The manufacturer would specify the procedure for monitoring the temperature of the REESS during testing. This could be measured by attaching thermocouples to the casing of the REESS or obtained from the CAN bus using appropriate tools.

[60] See Test reports in Docket No. NHTSA–2021–0029, available at *www.regulations.gov*. Detailed test procedures are provided in the test reports of the 2021 Chevrolet Bolt (NHTSA–2021–0029–0001), 2020 Nissan Leaf (NHTSA–2021–0029–0002), and the 2020 Tesla Model 3 (NHTSA–2021–0029–0003).

[61] Ranges in temperature and SOC are provided for this and other test procedures for practicability and ease of conducting the tests. In this case, the test is initiated with the REESS at a low SOC (10 to 15 percent) to enable discharging the REESS in a shorter period of time.

[62] Minimum level of fuel supply needed would be provided by the manufacturer.

[63] A discharge resistor may also be used for this purpose.

[64] If the manufacturer does not specify a discharge rate, a power load of 1kW is used.

[65] Temperature variation of 4 °C indicates stable operation of the REESS. As noted earlier, the manufacturer specifies the procedure for monitoring the temperature of the REESS during testing. This could be measured by attaching thermocouples to the casing of the REESS or obtained from the CAN bus using appropriate tools.

[66] See Test reports in docket no. NHTSA–2021–0029, available at *www.regulations.gov*. Detailed test procedures are provided in the test reports of the 2021 Chevrolet Bolt (NHTSA–2021–0029–0001), 2020 Nissan Leaf (NHTSA–2021–0029–0002), and the 2020 Tesla Model 3 (NHTSA–2021–0029–0003).

Temperature measurements may also be obtained through communication with the REESS control module. The vehicle manufacturer specifies the highest normal charge current and the over-current level that is applied. The battery tester/cycler is programmed to supply an over-current during charging at the level specified by the manufacturer.

The vehicle is turned on and the REESS is charged using the battery tester/cycler in accordance with manufacturer's recommended charging procedure with the highest normal charge current specified by the manufacturer.[67] After charging is initiated, an over-current specified by the manufacturer[68] is supplied above that requested by the vehicle. The charge current is increased over the course of 5 seconds from the highest normal charge current to the over-current level. The charge current and the overcurrent supply is continued until one of the following has occurred: (a) vehicle over-current protection controls terminate the charging, or (b) the temperature gradient of the REESS is less than or equal to 4 °C for a two-hour period.

If possible, a standard cycle is performed using the connected breakout harness and battery cycler. The test concludes with an observation period of one hour in which the vehicle is observed for electrolyte leakage, rupture, venting, fire, or explosion. At the conclusion of the observation period, the electrical isolation is determined in a similar manner as that in current FMVSS No. 305 S7.6, using a voltmeter to measure voltages.

iv. Over-Temperature Protection

While the impacts of over-temperature operation vary by chemistry, most battery chemistries can be negatively affected if operation by the driver is attempted at high temperatures (per the limits of a specific chemistry) or if aggressive operation is attempted at high temperatures (high-rate charging or discharging). A temperature imbalance or continued operation at elevated temperatures may even lead to thermal runaway of cells if appropriate countermeasures, such as de-rating,[69] are not taken.

Vehicle controls such as thermal management systems or the BMS continuously monitor temperature conditions to prevent REESS operation at elevated temperatures above the upper temperature boundary for safe REESS operations. GTR No. 20 includes a test to evaluate the performance of vehicle controls to prevent REESS temperatures exceeding the upper temperature boundary for safe REESS operations. NHTSA tentatively concludes that GTR No. 20's over-temperature test is practical and feasible based on the agency's own testing.[70] NHTSA proposes to include the over-temperature protection requirement and test procedure in FMVSS No. 305a, which aligns with GTR No. 20.

In the proposed FMVSS No. 305a, the over-temperature test is performed on a chassis dynamometer[71] with a complete vehicle. The SOC of the REESS at the beginning of the test is set between 90 to 95 percent. The test is conducted at ambient temperatures between 10 °C and 30 °C. For vehicles with on-board energy conversion systems (*e.g.,* internal combustion engine, fuel cell, etc.), the fuel system must have sufficient supply to allow operation of the energy conversion system for about one hour of driving. The cooling system for the REESS is disabled (or significantly reduced for a REESS that will not operate with the cooling system disabled) per manufacturer-supplied information.[72] For REESSs that will not operate if the cooling system is disabled, the maximum amount of coolant is removed to minimize the cooling system's operation for the test.

Temperature probes are connected to the REESS case to monitor changes in the REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

GTR No. 20 specifies that the vehicle be soaked for at least 6 hours in a thermally controlled chamber at 45 °C. However, NHTSA's testing[73] demonstrated that the presoaking of the vehicle at elevated temperatures does not raise the temperature of the REESS as significantly as by driving the vehicle under high acceleration and deceleration drive modes. Therefore, to reduce the test time and test burden, the agency does not believe it needs to specify presoaking of the vehicle.

The vehicle is installed on the chassis dynamometer and is placed into driving mode. The vehicle is driven on the dynamometer using the vehicle manufacturer-recommended appropriate drive profile for discharge and charge of the REESS that would raise the temperature of the REESS (with cooling system disabled or reduced function) above its safe operating temperature within one hour. If the vehicle manufacturer does not supply an appropriate drive profile, NHTSA will drive the vehicle over back-to-back aggressive acceleration (near 100% pedal application) and decelerations (near or above regenerative braking limits) such as the one shown in Figure 3 below, where the vehicle is accelerated to 80 mph and then decelerated to 15 mph within 40 seconds.

[67] The manufacturer supplied information define the constant current level and/or constant voltage level combination to charge the REESS. If a charge procedure is not specified, then a charge rate (*i.e.,* C-Rate) of C/3 current is used.

[68] If the vehicle manufacturer does not supply an appropriate over-current level, the battery test/cycler will be programmed to initially apply a 10 Ampere over-current. If charging is not terminated, the over-current level of 20 amps will be applied. Subsequently, the over-current supply is increased in steps of 10 amperes.

[69] De-rating is the reduction of a battery's available power and is typically due to a state that indicates an undesirable condition such as rapidly increasing cell temperature, elevated temperatures, or very cold cell temperatures. By temporarily reducing a battery's ability to provide and/or absorb power, de-rating allows the battery to cool down (or at least stop increasing in temperature) in situations with elevated temperatures and reduces operation when the battery is so cold that certain usage levels could cause damage.

[70] See Test reports in Docket No. NHTSA–2021–0029, available at *www.regulations.gov.* Detailed test procedures are provided in the test reports of the 2021 Chevrolet Bolt (NHTSA–2021–0029–0001), 2020 Nissan Leaf (NHTSA–2021–0029–0002), and the 2020 Tesla Model 3 (NHTSA–2021–0029–0003).

[71] A chassis dynamometer is a mechanical device that uses one or more fixed roller assemblies to simulate different road conditions within a controlled environment and is used for a wide variety of vehicle testing.

[72] Methods for disabling the cooling system may include crimping the liquid cooling hose or in the case of a refrigerant cooled package, removing the refrigerant fluid. For REESS cooled by cabin air, block the cabin air intakes used to provide cooling air flow to the REESS.

[73] System-Level RESS Safety and Protection Test Procedure Development, Validation, and Assessment-Final Report. DOT HS 812 782 October 2019. *https://rosap.ntl.bts.gov/view/dot/42551.*

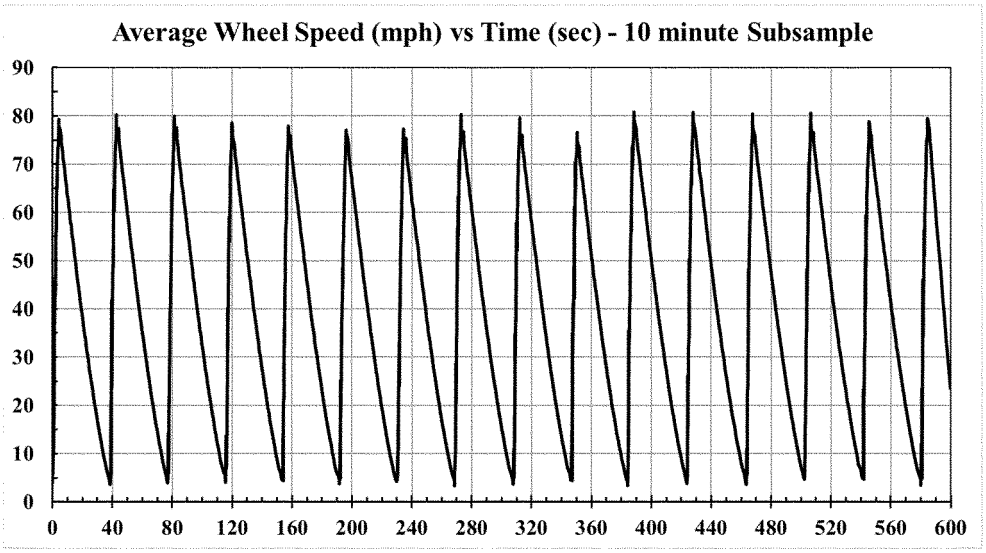


Figure 3—Drive Profile on Dynamometer To Quickly Raise the Temperature of the REESS. (For Illustration Purposes Only)

Vehicle battery designs and controls mitigate overheating of the REESS in different ways: (1) Terminate discharge/charge operations when the REESS temperature reaches its operating bounds; (2) Derate (reduce acceleration/speed of the vehicle) to prevent the REESS reaching its maximum operating temperature; (3) REESS cell chemistries are stable at higher REESS temperature. In order to accommodate different approaches to address hazards associated with overheating of REESS, GTR No. 20 provides three different options for terminating the discharge/charge cycles:

(a) the vehicle terminates the charge-discharge cycle,

(b) the REESS temperature gradient is less than or equal to 4 °C for a two-hour period, or

(c) 3 hours have elapsed from the time of starting the discharge-charge cycles on the chassis dynamometer.

In accordance with GTR No. 20, the agency proposes to use the same three options listed above to terminate the discharge/charge cycle.

At the conclusion of the over-temperature evaluation, a standard cycle is performed if possible. The test concludes with a 1-hour observation period in which the vehicle is observed for electrolyte leakage, rupture, venting, fire, or explosion. At the conclusion of the observation period, the electrical isolation is determined in a similar manner as that in FMVSS No. 305 S7.6, using a voltmeter to measure voltages.

v. External Short-Circuit Protection

The purpose of the external short-circuit protection test is to verify the performance of the vehicle controls (protection measure) against a short-circuit occurring externally to the REESS. During an external short-circuit event, large amounts of instantaneous current can be readily drawn generating copious amounts of heat. Associated safety risks include over-heating, gas venting, or arcing that can occur under fault conditions which can potentially lead to fire or explosion.

Vehicle controls or the BMS typically protect the REESS from an external short-circuit. GTR No. 20 includes a test to evaluate the performance of vehicle controls to protect the REESS from an external hard short-circuit (shorting resistance less than 5 milliohms). NHTSA tentatively concludes that GTR No. 20's external short-circuit test is practical and feasible based on the agency's own testing.[74] NHTSA proposes to include the GTR No. 20 external short-circuit protection requirement and test procedure in FMVSS No. 305a.

The external short-circuit test is performed on a complete vehicle. The SOC of the REESS at the beginning of the test is set at 90 to 95 percent SOC. The test is conducted at ambient temperatures between 10 °C and 30 °C. The breakout harness is installed on the vehicle at the manufacturer specified location(s).[75] Temperature probes are connected to the REESS case to monitor changes in the REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module. The short circuit contactor (with the contactors in open position) is connected to the breakout harnesses. The total resistance of the equipment to create the external short circuit (short circuit contactor and breakout harnesses) is verified to be between 2 to 5 milliohms.[76] To begin the short-circuit evaluation, the short-circuit contactors are closed. The short-circuit condition is continued until (1) current is no longer present or (2) one hour after the temperature probe on the REESS has stabilized with a temperature change of less than 4 °C for a two-hour period.

If possible, a standard cycle is performed after termination of the short-circuit. Fuses that opened during the short-circuit are not replaced, and the standard cycle procedure is not performed if it is not possible to charge and discharge the vehicle.

The vehicle is observed for one hour for electrolyte leakage, rupture, venting, fire, or explosion. The external short-circuit test concludes with an electrical isolation determination in a similar manner as that in current FMVSS No. 305a S7.6 using a voltmeter to measure voltages.

vi. Low-Temperature Protection

Uncontrolled repeated operation at low temperatures, especially charging

[74] See Test reports in Docket No. NHTSA–2021–0029, available at *www.regulations.gov*. Detailed test procedures are provided in the test reports of the 2021 Chevrolet Bolt (NHTSA–2021–0029–0001), 2020 Nissan Leaf (NHTSA–2021–0029–0002), and the 2020 Tesla Model 3 (NHTSA–2021–0029–0003).

[75] If the manufacturer does not provide information on the location to connect the breakout harness for the external short circuit test, the breakout harnesses may be connected on either side of the positive and negative terminals of the pack.

[76] GTR No. 20 specifies the external short circuit resistance not exceeding 5 milliohms. The agency is specifying a range from 2 to 5 milliohms for ease of conducting the tests and to ensure objectivity of the test.

for lithium-ion battery chemistries, may result in lithium plating or cell damage that could eventually lead to reduced performance or degraded life during subsequent operation. While single time operation of REESS in very cold temperatures would not lead to a severe event, some REESS designs use special chemical reactions which can damage the REESS if it is charged at high rates in very cold temperatures. A subsequent high rate of charging of such a damaged REESS may lead to fire or explosion. Therefore, the rate of charging may need to be terminated or limited in very cold temperatures.

Currently, no practical test procedure is available to evaluate the performance of vehicle controls in low temperature conditions because the effects of repeated charging at very low temperatures occur over a very long period of time. Therefore, GTR No. 20 requires manufacturers to provide documentation that includes a system diagram, a written explanation on the lower boundary temperature for safe REESS operation, the method of detecting REESS temperature, and the action taken when the REESS temperature is at or below the lower boundary for safe REESS operation.

NHTSA proposes to include documentation requirements based on GTR No. 20 into FMVSS No. 305a. NHTSA proposes that the manufacturer provide documentation, upon NHTSA's request, to demonstrate how the vehicle monitors and appropriately controls REESS operations at low temperatures at or below the lower temperature boundary for safe REESS operation. The proposed requirements would indicate how manufacturers identify, verify, and ensure vehicles have low-temperature protections in place. Specifically, the proposal requires the manufacturer-supplied documentation for a specific vehicle make, model, and model year would include the following:

(1) A description of the lower temperature boundary for safe REESS operation in all vehicle operating modes.

(2) A description and explanation of C-rates at the lower temperature boundary for safe REESS operation.

(3) A description of the method used to detect REESS temperature.

(4) A system diagram with key components and subsystems involved in maintaining safe REESS charging and discharging operation for temperatures at or below the lower temperature boundary for safe REESS operation.

(5) A description of how the vehicle controls, ancillary equipment, and design features were validated and verified for maintaining safe REESS operations at or below the lower temperature boundary for safe REESS operation.

(6) A description of the final review/audit process of the manufacturer, and the accompanying results of the manufacturer's final assessment of risk management, and risk mitigation strategies.

NHTSA intends these documentation measures to demonstrate that the manufacturer has considered, assessed, and mitigated identified risks for safe operation of the vehicle. NHTSA tentatively agrees with GTR No. 20 that there is a safety need for low temperature protections for the REESS. Without protections, uncontrolled repeated operation at low temperatures poses an unreasonable risk of fire or explosion. In the absence of information enabling NHTSA to propose a practical test procedure to evaluate the performance of vehicle controls in low temperature conditions, the agency is proposing to require manufacturers to submit documentation to NHTSA about pertinent low temperature safety hazards, describe their risk mitigation strategies for the safety hazards, and how they assessed the effectiveness of their mitigation strategies.

NHTSA would review the documentation to understand the safety hazards associated with the particular REESS in the vehicle, see whether the manufacturer conducted an assessment of the risks, and understand the measures the manufacturer undertook to mitigate those known risks. This approach is intended to evolve over time as battery technologies continue to rapidly evolve. It is an interim measure intended to assure that manufacturers will identify and address the low temperature safety risks of the REESS. In section VI., NHTSA requests comments on whether the proposed document requirement would be better placed in a general agency regulation than in proposed FMVSS No. 305a.

2. Mitigating Risk of Thermal Propagation Due to Internal Short Within a Single Cell in the REESS

i. Safety Need

The potential for thermal runaway is a characteristic of the lithium-ion cells currently used in REESSs for electric vehicle propulsion. Thermal runaway of a lithium-ion cell in a REESS occurs when the thermal stability limit of the cell chemistry is exceeded, and the cell releases its energy via an exothermic reaction at an uncontrolled rate such that heat is generated faster than it is dissipated. The thermal runaway in a single cell may propagate to the surrounding cells through conductive, convective, and radiative heat transfer modes, causing reactions which create smoke, fire or, in very rare circumstances, explosion. Lithium-ion cells have flammable electrolyte that upon decomposition provides oxygen to the fire caused by the thermal runaway, which increases the likelihood of its propagation to other cells and even outside the REESS. The self-oxygenating fires involving the cells in a REESS are therefore difficult to extinguish. The smoke, fire, toxic gas emissions, and explosion resulting from the thermal runaway can cause hazardous conditions for vehicle occupants and those near the vehicle.

One root-cause of single-cell thermal runaway (SCTR) and propagation due to an internal short-circuit relates to problems within the cells. While this NPRM contains many performance tests for the safe operation of the REESS, none of these tests would mitigate or prevent thermal runaway due to an internal short-circuit within a cell of the REESS and subsequent fire propagation. The mechanism of an internal short circuit in a cell is complex and requires further study. Currently, the risk of a spontaneous internal short circuit is heavily dependent on battery design, such as use of non-flammable electrolytes, ionic liquids, heat resistant and puncture-proof separators, and anode and cathode materials. However, as discussed below, a performance test that would establish a minimum standard of performance for the materials is not available now.

GTR No. 20 addresses the hazards associated with SCTR due to an internal short circuit through a documentation approach that requires manufacturers to provide (to the testing authority) information on risk mitigation strategies used in vehicle design to counteract the safety risk. GTR No. 20 also requires a warning system to allow vehicle occupants sufficient time to egress the vehicle before hazardous conditions are present in the passenger compartment due to SCTR within the REESS. GTR No. 20 requires documentation of the warning system, and requires operation of the warning system only when the vehicle propulsion system is turned on.

NHTSA tentatively generally agrees that a documentation approach on risk mitigation strategies currently has merit, given there is no suitable performance test to validate mitigation or prevention of SCTR within a REESS. NHTSA is proposing a documentation approach based on GTR No. 20 but has focused the GTR's requirements to better address this safety need pending development of an objective performance test that can

be applied to all REESSs in vehicles. In section VI., NHTSA requests comments on whether the proposed document requirement would be better placed in a general agency regulation than in proposed FMVSS No. 305a.

NHTSA is not proposing to require a warning system, or documentation of the warning system, as specified in GTR No. 20. As explained fully later in this section, NHTSA believes such a requirement would not mitigate the safety hazards observed in the field.

ii. GTR No. 20 Phase 1 Requirements

GTR No. 20 recognizes that, in general, REESS cells are manufactured with manufacturing controls to mitigate safety problems. Based on current manufacturing control processes, the probability of manufacturing problems within a cell is generally considered to be less than one in a million.[77] Since the likelihood of two cells in a REESS going into spontaneous single-cell thermal runaway (SCTR) simultaneously is significantly lower,[78] the focus of GTR No. 20 is to mitigate the hazards associated with SCTR due to an internal short-circuit within a single cell.

GTR No. 20 addresses the SCTR safety hazard through a documentation approach that requires manufacturers to provide (to the testing authority on request) information on risk mitigation strategies used in vehicle design to counteract the safety risk, and documentation on a warning system that warns occupants to egress the vehicle. The documentation requirements for risk mitigation strategies are only generally described, however. This is because during the development of GTR No. 20, there was no significant evidence of electric vehicle fires due to SCTR and propagation due to an internal short-circuit. At that time, the thought was that vehicle occupants would be exposed to hazardous conditions if the SCTR propagates outside of the REESS to other parts of the vehicle. Therefore, GTR No. 20 focuses primarily on the warning and less on mitigating the risk of the SCTR within the cell. The GTR requires that a warning be provided to the driver 5 minutes before hazardous conditions are present in the passenger compartment due to SCTR and subsequent fire propagation. Five minutes was considered sufficient time for vehicle occupants to egress the vehicle before exposure to hazardous conditions. Under the GTR, manufacturers would satisfy the requirement for a warning by providing documentation that the vehicle provides the required warning.

GTR No. 20 uses a documentation approach for both the risk mitigation strategies and the warning because an objective test procedure is not available. Existing methods of initiating thermal runaway simulating an internal short-circuit within a single cell in a REESS are intrusive and dependent on the type of cell chemistry and cell type.[79] Additionally, different methods of initiation could result in different results.[80] NHTSA funded research to evaluate different thermal runaway propagation test methods by examining various existing methods of initiating thermal runaway, including heating element method, rapid heater method, nail penetration, and laser method, on batteries with a variety of chemistries, formats, and configurations.[81] The research indicated that the thermal runaway initiation methods may influence the test results and the most appropriate initiation method for a battery may depend on battery chemistries, formats, and configurations.

The repeatability and reproducibility of a potential performance test using existing methods of thermal runaway initiation, and whether such a test could be conducted on all applicable vehicles, are unknown. Due to the rapid development of electric vehicle propulsion technology, it was unclear during development of the GTR if any existing performance test could apply to future vehicle designs without restricting further enhancement of electric vehicle propulsion systems. Therefore, instead of specifying a performance test for thermal runaway and propagation due to an internal short-circuit in a single cell of a REESS, GTR No. 20 requires manufacturers to submit documentation. Such documentation must show risk mitigation strategies in their vehicle designs for reducing hazards to vehicle occupants associated with thermal runaway due to an internal short-circuit in a single cell in the REESS. The documentation must also detail how the vehicle's warning system activates a warning at least 5 minutes before hazardous conditions arise in the passenger compartment.

Specifically, GTR No. 20 specifies the following documentation requirements:

- A description of the warning system.
- Parameters (such as voltage, temperature, or current) that trigger the warning indicator (telltale).
- A risk reduction analysis using appropriate industry standard methodology (for example, IEC 61508,[82] MIL–STD 882E,[83] ISO–26262,[84] fault analysis as in SAE J2929,[85] or similar), which documents the risk to vehicle occupants caused by a single-cell thermal runaway triggered by an internal short-circuit leading to thermal propagation and the expected risk reduction resulting from implementation of the identified risk mitigation functions or characteristics.
- A system diagram of all relevant physical systems and components which contribute to the protection of vehicle occupants from hazardous effects caused by thermal propagation triggered by a single-cell thermal runaway event due to an internal short-circuit.

[77] A REESS consists of a number of cells (n) in the range of 100 to 500. Therefore, the probability of a single-cell thermal runaway and propagation event due to an internal short-circuit is estimated to be the product of the number of cells times one in a million ($n \times 10^{-6}$). *https://batteryuniversity.com/article/bu-304a-safety-concerns-with-li-ion#:~:text=Lithium%2Dion%20batteries%20have%20a,than%20those%20in%20consumer%20products.*

[78] The probability of two cells simultaneously undergoing single-cell thermal runaway and propagation due to an internal short-circuit is equal to the product of the probability of a single-cell thermal runaway ($n^2 \times 10^{-12}$).

[79] One common method of initiating a thermal runaway is to heat a cell externally using a heating element. This would require disassembly of the casing of the REESS, adhering a heating element to the surface of a cell, and adding thermocouples to verify the heating element only provides heat to a single cell and not to adjacent cells. The amount of heat applied to initiate a thermal runaway depends on the cell chemistry (more volatile chemistries requiring less heat input), and the cell design/type (thick wall cells needing more heat input). The disassembly of the REESS, the addition of a heating element, and the heat input is intrusive to the REESS.

[80] Another method of initiating a thermal runaway in a cell is to penetrate a nail into a cell in the REESS. The orientation of the nail penetration depends on the cell design and in some instances, nail penetration may not cause a thermal runaway. While this method may not require the REESS casing to be opened, the penetrating nail compromises the casing and the cell structure. Additionally, the depth of nail penetration may result in differences in heat release that may not be similar in repeat tests and in tests using a heating element.

[81] Lamb, J., Torres-Castro, L., Stanley J., Grosso, C, Gray, L., ''Evaluation of Multi-Cell Failure Propagation,'' Sandia Report SAND2020–2802, March 2020. *https://www.osti.gov/servlets/purl/1605985.*

[82] IEC–61508:2010, ''Functional Safety of Electrical/Electronic/Programmable Electronic Safety-related Systems''. *https://webstore.iec.ch/searchform&q=IEC%2061508.*

[83] MIL–STD–882E:2012, ''System Safety''. *https://quicksearch.dla.mil/qsDocDetails.aspx?ident_number=36027.*

[84] ISO–26262 series:2018, ''Road vehicles—Functional Safety''. *https://www.iso.org/search.html?q=ISO-26262&hPP=10&idx=all_en&p=0&hFR%5Bcategory%5D%5B0%5D=standard.*

[85] SAE J2929:2013, ''Safety Standard for Electric and Hybrid Vehicle Propulsion Battery Systems Utilizing Lithium-based Rechargeable Cells''. *https://www.sae.org/standards/content/j2929_201302/.*

• A diagram showing the functional operation of the relevant systems and components and identifying all relevant risk mitigation functions or characteristics.
• For each identified risk mitigation function or characteristic:
○ A description of its operation strategy,
○ Identification of the physical system(s) or component(s) which implements the function,
○ One or more of the following engineering documents relevant to the manufacturers design which demonstrates the effectiveness of the risk mitigation function:
▪ Tests performed including procedure used and conditions and resulting data,
▪ Analysis or validated simulation methodology and resulting data.

iii. NHTSA Proposal

NHTSA tentatively agrees with GTR No. 20's rationale for the documentation requirements for risk mitigation of thermal propagation events resulting from SCTR due to an internal short-circuit within a cell in the REESS. NHTSA tentatively concludes that due to the rapidly evolving REESS technology and control systems to manage the performance condition and safety of the REESS, a performance test to validate mitigation of thermal propagation resulting from SCTR within the REESS is not currently feasible. A performance test for a warning, when the vehicle propulsion system is turned on, that provides sufficient time for vehicle occupants to egress the vehicle before hazardous conditions arise in the passenger compartment after a thermal runaway is initiated in a cell of the REESS would be unduly design restrictive, not applicable to all vehicle/REESS types, and not relevant to real world incidents.[86]

This NPRM proposes a documentation requirement for FMVSS No. 305a to require manufacturers to provide to NHTSA, upon NHTSA's request, information about their efforts to identify and address potential safety problems with SCTR and propagation due to an internal short-circuit. The information would be provided by a manufacturer in accordance with NHTSA's specified structure in four parts. NHTSA's proposed documentation component structure is based on elements from the GTR No. 20, ISO–6469–1: Amendment 1 2022–11,[87] and ISO–26262.[88] The documentation submitted by the manufacturer is required to include all known risks to vehicle occupants and bystanders, risk assessment, risk management, and risk mitigation strategies in three vehicle operational modes (*i.e.,* external charging mode,[89] active driving possible mode,[90] and parking mode [91]). NHTSA's proposal goes beyond GTR No. 20's active driving possible mode to ensure manufacturers consider all risks known to it in three vehicle operational modes. The assessment and validation of these strategies may involve a combination of physical testing and simulations at the component level and/or full vehicle level. The reporting requirements would apply to REESSs of all types (including REESS with non-flammable electrolyte).

The objective of the documentation is for vehicle manufacturers to identify the risks of single-cell thermal runaway and propagation for their REESS type, identify strategies to mitigate those risks, and demonstrate how those strategies work. The documentation would accomplish the following goals:
• It would identify all risks known to the manufacturer related to single-cell thermal runaway and propagation due to an internal short-circuit;
• It would discuss whether and how each identified risk is managed and/or mitigated by at least one risk mitigation strategy;
• It would explain the reasons the manufacturer believes each risk mitigation strategy is effective (measures taken to verify and/or validate them, including any final review/audit results); and,
• It would identify, describe, and provide any review/audit process and results that accompany the final assessment of risk management and risk mitigation strategies.

Proposed provisions to achieve the above goals are discussed in detail below.

The documentation requirement proposed by NHTSA is divided into four sections with more detailed requirements than GTR No. 20. Under the agency's requirements, in Part I, System Analysis, the vehicle manufacturer would provide information describing which conditions specific to the vehicle could lead to a SCTR event caused by an internal short-circuit. The conditions identified serve as the inputs to identify the functions and failure modes for the risk identification in Part II.

Part I would require the following documentation:
• A system diagram and a description of all relevant physical systems and components of the REESS, including information about the cell type and electrical configuration, cell chemistry, electrical capacity, voltage, current limits during charging and discharging, thermal limits of the components that are critical for thermal propagation safety;
• A system diagram, operational description of sensors, components, functional units relevant to single-cell thermal runaway due to internal short-circuit and thermal propagation, and the interrelationship between the identified sensors, components, and functional units;
• A description of conditions under which a single-cell thermal runaway and propagation event due to an internal short-circuit could occur;
• A description of how the identified conditions are allocated to each identified component, functional unit, and subsystem;
• A description of the process used to review the identified conditions and their allocation to the identified sensors, components, and functional units, for completeness and validity; and
• A description of any system for warning or notification prior to the occurrence of thermal runaway in a cell, including a description of the detection technology and mitigation strategies, if any.

Part II, Safety Risk Assessment and Mitigation Process, provides a description of all identified safety risks and strategies to mitigate and manage

[86] In most real-world incidents resulting in fire due to thermal runaway of a single cell in the REESS, the vehicle was parked, with propulsion system turned off, and with no occupants in the vehicle. In some cases, the vehicles were parked in garages of homes. Therefore, a requirement for a warning to vehicle occupants in the vehicle with propulsion system turned on would not have helped prevent the fire or mitigated hazards to people in homes or in the vicinity of the burning parked vehicle.

[87] ISO 6469–1:Third Edition 2019–04 Amendment 1 2022–11, ''Electrically propelled road vehicles—Safety specifications—Part 1: Rechargeable energy storage system (RESS),'' specifies safety requirements for REESS, including test methodology for initiating thermal runaway in a cell for the purpose of conducting a thermal runaway propagation test and a format for reporting on risk mitigation strategies of thermal propagation resulting from a thermal runaway in a single cell of an REESS due to an internal short within the cell.

[88] ISO 26262: 2018, ''Road vehicles—Functional safety,'' provides a comprehensive collection of standards to manage and implement road vehicle functional safety from concept phase to production and operation. The standard provides guidelines for overall risk management, individual component development, production, operation, and service.

[89] External charging mode is the vehicle operational mode in which the charge connector is connected to the vehicle charge inlet for the purpose of charging the REESS.

[90] Active driving possible mode is the vehicle mode when application of pressure to the accelerator pedal (or activation of an equivalent control) or release of the brake system causes the electric powertrain to move the vehicle.

[91] Parking mode is the vehicle mode in which the vehicle power is turned off, the vehicle propulsion system and ancillary equipment such as the radio are not operational, and the vehicle is stationary.

these risks. Part II distinguishes between primary and secondary risk mitigation strategies. Primary risk mitigation strategies mitigate the risk of SCTR due to an internal short-circuit and the occurrence of thermal propagation that may result from SCTR. Primary risk mitigation strategies include manufacturing quality control to mitigate defects in cells of REESS, REESS design features such as heat sinks, cell spacing, coolant, advanced battery management system with prognostics and diagnostics systems [92] to manage the health of the cells of an REESS and detect a possible thermal runaway condition before it occurs. In contrast, secondary risk mitigation strategies may not reduce the risk of thermal runaway or thermal propagation but reduce the hazards associated with thermal propagation. Secondary risk mitigation strategies include warning systems to vehicle occupants/bystanders and/or notification to emergency personnel in the event of thermal propagation (*e.g.,* automatic notification to 911 operators). NHTSA anticipates that secondary risk mitigation strategies would be employed as an addition to primary risk mitigation strategies in the overall safety strategy.

Part II would require the following documentation:

- A description of safety risks and safety risk mitigation strategies, and how these were identified (*e.g.,* Failure Mode and Effects Analysis (FMEA), or Failure Modes, Effects, and Criticality Analysis (FMECA)); [93]
- A description of how each risk mitigation manages/mitigates the identified safety risks.

In Part III, Verification and Validation of Effective Risk Mitigation Strategies, the manufacturer provides information showing how they verify the effectiveness of the identified mitigation strategies in Part II to mitigate the identified safety risks. The vehicle level assessment examines how the entire vehicle monitors and mitigates safety risks. The vehicle level assessment is the culmination of the verification/validation results of each individual risk mitigation strategy.

Part III would require the following documentation:

- A summary of the process used to verify each identified risk is addressed by at least one risk mitigation strategy;
- A description of how each risk mitigation strategy was verified and validated for effectiveness; [94]
- A description of the verification and validation results for each risk mitigation strategy; and
- A vehicle level assessment evaluating the system response to safety risks associated with the REESS. Vehicle level assessment and validation could be the use of physical tests and/or validated models/simulations at a component level scaled up to evaluate the system response.

Part IV, Overall Evaluation of Risk Mitigation, shall address:

- Results of any final review/audit responsible for reviewing the technical content, completeness, and verity of the documentation submitted by the manufacturer.

The risk-based methodology outlined above is intended to mitigate the safety hazards associated with SCTR and propagation from an internal short-circuit. The requirement is intended to ensure that manufacturers are aware of the safety risks at issue and have considered safety risk mitigation strategies. The documentation submitted by the manufacturer will inform NHTSA of the safety risk mitigation strategies manufacturers have utilized for the identified safety hazards, enable NHTSA to oversee those safety hazards, and inform future regulatory measures.. This approach is battery technology neutral, not design restricted, and is intended to adapt over time as battery technologies continue to rapidly evolve. NHTSA seeks comment on the documentation requirements described above. In section VI., NHTSA requests comments on whether the proposed document requirement would be better placed in a general agency regulation than in proposed FMVSS No. 305a.

NHTSA's Decision Not To Propose a Warning Requirement

GTR No.20's warning requirement rationale is that the warning would allow vehicle occupants sufficient time to egress the vehicle before hazardous conditions are present in the occupant compartment. NHTSA does not agree with GTR No.20's rationale for a warning requirement related to SCTR due to an internal short-circuit within the cell. NHTSA is not proposing to require such a warning system, or documentation of the warning system, as specified in GTR No. 20 because such a requirement would not mitigate the safety hazards observed in the field, as described in detail below.

Field data and incidents related to SCTR and propagation due to an internal short-circuit in lithium-ion REESSs are sparse and anecdotal. However, when reviewing the limited number of non-crash and non-abuse related electric vehicle fire incidents in the United States,[95] the following trends emerge:

- The vehicle operation mode is in the usual parking mode.[96]
- The vehicle is parked in a garage attached to a house, a parking garage, or on the street.
- The state of charge (SOC) of the REESS was generally in the upper range.

Fire statistics reports by South Korea identified 35 electric vehicle fires since 2018, among which 20 electric vehicle fires originated in the REESS of the vehicles when the vehicle was parked and the SOC was greater than 90 percent.[97] In the electric vehicle fire incidents in the United States and South Korea, the vehicle fire propagated to adjacent vehicles and structures with release of copious amounts of smoke, resulting in significant property damage. The GTR No. 20 requirement for a warning to the driver would not have helped mitigate the electric vehicle fires and would not have mitigated property damage.

Accordingly, this NPRM does not propose to require a warning to occupants or documentation pertaining to a warning, as such requirements would not sufficiently address a safety need. NHTSA believes the documentation requirements in GTR No. 20 for a warning to the driver are not relevant to the field-observed electric vehicle fires likely resulting from SCTR. NHTSA believes that vehicle designs using a risk mitigation strategy to mitigate or prevent the occurrence of SCTR incidents would better address the risks and hazards associated with spontaneous electric

[92] Prognostic technologies predict the health of a system or a component of a system in the future and diagnostic technologies determine a specific problem with a system or component of a system.

[93] FMEA and FMECA are established methodologies to identify failure modes and postulate the effects of those failures on the system. Refer to *https://www.dau.edu/acquipedia-article/failure-modes-effects-analysis-fmea-and-failure-modes-effects-criticality.*

[94] Possible verification/validation methods for Part III include (but are not limited to) fault injection tests, software, and hardware performance tests at component and/or system level, and system level performance evaluation using validated mathematical models.

[95] E.g., Bolt EV Recall Information *https://experience.gm.com/recalls/bolt-ev.*

[96] Usual parking mode is the vehicle operational mode in which the main software is ''Off'', the gear selector is in ''P'' (park), the energy supply is disconnected, the REESS power line is disconnected, the cooling system is not operational, the vehicle controls that manage safe operation of the REESS (*e.g.,* Battery Manage System) are not energized, and the vehicle occupants are typically not present.

[97] EVS23–E1TP–0200 [KR] EV Fire Records of Korea.pptx. *https://wiki.unece.org/display/trans/EVS+23rd+session.*

vehicle fires that originate within the REESS than a warning to egress the vehicle. This NPRM proceeds with NHTSA's preferred approach which would require documentation demonstrating that the manufacturer has considered and developed risk mitigation strategies to address SCTR in developing their electric vehicles.

GTR No. 20 Phase 2 Test Procedure Currently Under Consideration

The IWG is continuing work on developing a test-based approach for SCTR due to an internal short-circuit in a single cell within the REESS. The plan is for a future regulation to require that the thermal propagation test procedure fulfill the following conditions:

1. Triggering of thermal runaway at a single-cell level must be repeatable, reproducible, and practicable,
2. Judgment of thermal runaway through common sensors, *e.g.,* voltage and temperature, needs to be practical, repeatable, and reproducible, and
3. Judgment of whether consequent thermal events involve severe thermal propagation hazards, needs to be unequivocal and evidence based.

NHTSA discusses this work in the Appendix B to this preamble. Comments are requested that could assist the agency in future decisions on this matter.

3. Warning Requirements for REESS Operations

As part of a risk-mitigation approach addressing multiple aspects of electrical system safety, NHTSA proposes requiring: (a) a thermal event warning; and (b) a vehicle control malfunction warning for drivers. The thermal event warning would be assessed by a performance requirement, while the vehicle control malfunction warning would be a documentation requirement.

i. Thermal Event Warning

A ''thermal event'' presents an urgent safety critical situation. The term refers to a condition when the temperature within the REESS is significantly higher (as defined by the manufacturer) than the maximum operating temperature specified by the manufacturer. Thermal events within REESS could occur due to moisture and dust accumulation within the REESS that cause a short circuit at the connections or electronic components within the REESS. A thermal event within a battery pack can be a safety critical event, as it can lead to smoke, fire, and/or explosion. A warning provided about a thermal event within the REESS would reduce the likelihood of occupant exposure to smoke, fire, and/or explosion.

GTR No. 20 requires the vehicle to provide a warning to the driver in the case of a ''significant thermal event'' in the REESS (as specified by the manufacturer) when the vehicle is in active driving possible mode.[98] The GTR does not contain a performance test for the warning but instead requires manufacturers to provide documentation on the parameters that trigger the warning and a description of the system for triggering the warning. Specifically, the documentation requirements include:

(1) Parameters and associated threshold levels that are used to indicate a thermal event (*e.g.,* temperature, temperature rise rate, SOC level, voltage drop, electrical current, etc.) to trigger the warning.

(2) A system diagram and written explanation describing the sensors and operation of the vehicle controls which manage the REESS in the event of a thermal event.

NHTSA Proposal

NHTSA proposes to include a requirement for an audio and visual warning to the driver if a thermal event occurs in the REESS during the active driving possible mode. Instead of a documentation requirement as in the current GTR No. 20, NHTSA proposes a performance test to evaluate the required warning of a thermal event originating within the REESS.

NHTSA proposes to initiate the thermal event in the REESS by inserting a heater within the REESS that achieves a peak temperature of 600°C within 30 seconds. In the proposed test procedure, the REESS is removed from the vehicle, if possible, and the REESS casing is opened to attach the heater to a cell or cells in the REESS in a manner to put at least one cell in the REESS into thermal runaway. In this test, there is no need to restrict heating to a single cell within the REESS as the test is verifying activation of a warning when a thermal event occurs in the REESS regardless of the cause (*e.g.,* an electric short between electronic components in the REESS, thermal runaway of multiple cells, etc.). Following installation of the heater in the REESS, the REESS casing is closed, the REESS is re-installed in the vehicle, and the vehicle propulsion system is turned on. The heater within the REESS is then activated. NHTSA proposes that the audio-visual warning must be activated within three minutes [99] of initiating the heater in the REESS. NHTSA has tentatively decided not to specify characteristics of the audio-visual warning to provide flexibility in how manufacturers communicate this safety critical information to vehicle occupants so they quickly egress the vehicle.

The proposed test is for evaluating appropriate activation of a required warning system when there is a thermal event in the REESS that could be hazardous to vehicle occupants.[100] NHTSA tentatively concludes that the proposed performance test to evaluate the warning system would not be design restrictive and can be conducted on all applicable vehicles. Therefore, a performance test is proposed instead of adopting the documentation requirement in GTR No. 20. NHTSA seeks comment on the merits of the proposed performance test to evaluate the thermal event warning system instead of the documentation requirement in GTR No. 20. In addition, NHTSA seeks input on the type of heater, the heater characteristics (power, peak temperature) and possible locations of the heater within the REESS to simulate a thermal event to trigger the warning. While this NPRM does not require specific features of the audio-visual warning itself, comments are requested on what characteristics an effective audio-visual warning should have.

ii. Warning in the Event of Operational Failure of REESS Vehicle Controls

NHTSA is proposing to require that drivers be warned if there is a malfunction of vehicle controls that manage the safe operation of the REESS. This NPRM proposes a documentation approach for this type of warning, similar to GTR No. 20.

GTR No. 20 specifies that when the vehicle is in the active driving possible mode, the vehicle shall provide a warning telltale to the driver in the event of a malfunction of the vehicle controls that manage the safe operation of the REESS. GTR No. 20 requires manufacturers to provide

[98] Active driving possible mode means the vehicle mode when application of pressure to the accelerator pedal (or activation of an equivalent control) or release of the brake system causes the electric power train to move the vehicle.

[99] 3 to 5 minutes is considered to be sufficient time for able body individuals to evacuate light and heavy passenger vehicles before the occurrence of a hazardous event. *https://one.nhtsa.gov/reports/0900006480b01bbc.pdf.*

[100] This is unlike the risk management approach for SCTR where the goal is to mitigate hazards of thermal propagation (fire, smoke, gas emissions). Because risk management strategies for mitigating thermal propagation hazards due to SCTR differ considerably in vehicle designs, an objective performance test that can be conducted on all applicable vehicles is not available and so a documentation requirement is proposed.

documentation demonstrating that a warning to the driver will be provided in the event of malfunction of one or more aspects of vehicle controls that manage REESS safe operation. Specifically, vehicle manufacturers shall make the following documentation available to the testing authority:

(1) A system diagram that identifies all the vehicle controls that manage REESS operation. The diagram must identify what components are used to generate a warning telltale indicating malfunction of vehicle controls to conduct one or more basic operations.

(2) A written explanation describing the basic operation of the vehicle controls that manage REESS operation. The explanation must identify the components of the vehicle control system, provide description of their functions and capability to manage the REESS, and provide a logic diagram and description of conditions that would lead to triggering the warning telltale.

NHTSA Proposal

Vehicle controls manage several REESS operations, some of which are safety critical. There are multiple external fault scenarios [101] that could trigger a vehicle control to take corrective actions to ensure safe REESS operations. This NPRM includes performance requirements to address these external fault scenarios that assume proper functioning of the vehicle controls that manage safe REESS operations. However, if the vehicle controls that manage safe REESS operation are not functioning properly, the REESS may not be adequately protected from fault scenarios, which could lead to REESS degradation and eventually result in thermal propagation and other safety hazards. Therefore, it is important to notify the driver or front row occupants in the event there is malfunction of these vehicle controls that manage safe REESS operations.

Due to the complexity and varied designs of vehicle controls that manage REESS safe operation, no single test procedure could be developed that would fully evaluate whether a warning turns on in the event of operational failure of vehicle controls. Therefore, in accordance with GTR No. 20, this NPRM proposes to require manufacturers to provide a visual warning to the driver (*e.g.,* like a check engine light) and documentation demonstrating that the visual warning will be provided in the event of operational failure of one or more aspects of vehicle controls that manage REESS safe operation.

NHTSA proposes the GTR No. 20 requirements for a visual warning to the driver of any malfunction of the REESS vehicle controls, and manufacturer documentation. In addition, NHTSA proposes to include two additional requirements that ensure manufacturers have validated functionality of the warning system:

(1) Any validation test results by the vehicle manufacturer to confirm a visual warning is displayed in the presence of malfunction of the REESS operation vehicle controls.

(2) A description of the final manufacturer review or audit process and results of any final review or audit evaluating the technical content and the completeness and verity of the documentation submitted by the manufacturer.

NHTSA tentatively concludes that a documentation approach is merited to demonstrate that the manufacturer has considered the effectiveness of a visual warning of the malfunction of the REESS operational vehicle controls. In the absence of information enabling NHTSA to propose a practical test procedure to evaluate the performance of a warning, the documentation approach ensures that manufacturers are aware of the safety risks at issue and have considered ways to address the risks. NHTSA would review the documentation to understand the visual warning associated with the particular REESS in the vehicle, see whether the manufacturer conducted an assessment of its effectiveness, and understand the measures the manufacturer undertook to validate such performance.

This approach is an interim measure intended to assure that manufacturers will identify, address, and validate the effectiveness of their visual warnings that help manage safe REESS operation. The approach is intended to evolve over time as battery technologies and NHTSA's information about the REESS safety risk mitigation strategies evolve. In section VI., NHTSA requests comments on whether the proposed document requirement would be better placed in a general agency regulation than in proposed FMVSS No. 305a.

4. Protection Against Water Exposure

NHTSA proposes to adopt GTR No. 20's physical water test requirement, where a vehicle shall maintain electrical isolation resistance after the vehicle is exposed to water under normal vehicle operation, such as in a car wash or while driving through a pool of standing water. However, the agency is not proposing to adopt GTR No. 20's two other water exposure methods: documentation measures and warning requirements.

Environmental effects such as exposure to water and moisture may deteriorate the electrical isolation of high voltage components in the powertrain. This may first lead to an electric system degradation and eventually lead to an unsafe electrical system for vehicle occupants, operators (during charging) or by-standers. Under extreme conditions, fire can originate from compromised electrical components due to water ingress. GTR No. 20 contains water exposure shock protection specifications in which a vehicle shall maintain electrical isolation resistance after the vehicle is exposed to water under normal vehicle operation, such as during a car wash or driving through a pool of standing water.

NHTSA begins by noting that GTR No. 20 does not have specific requirements to address vehicle fires due to vehicle submersion such as floods and storm surges, and this NPRM is not covering that area. Floods are considered as catastrophic events, and as noted above, one of the principles for developing GTR No. 20 was to address unique safety risks posed by electric vehicles and their components to ensure a safety level equivalent to conventional vehicles with internal combustion engine (ICE). NHTSA continues to research the area of REESS performance post-submersions. This issue is discussed in more detail later in this section.

GTR No. 20 Requirements

GTR No. 20 contains water exposure shock protection specifications in which a vehicle shall maintain electrical isolation resistance after the vehicle is exposed to water under normal vehicle operation. GTR No. 20 specifies three compliance options contracting parties may use in their regulations:

- Physical tests—(1) the vehicle is subjected to normal washing using a hose nozzle and conditions in accordance with IPX5, after which (2) the vehicle is driven in a freshwater wade pool (10 cm depth) over a total distance of 500 m at a speed of 20 km/hr for approximately 1.5 minutes (min). The electrical isolation of high voltage sources in the electric powertrain are verified at the conclusion of each test and once again after 24 hours.
- Documentation—The vehicle manufacturers provide documentation

[101] These fault scenarios include overcharge, over-discharge, overcurrent, external short-circuit, and overheating of the REESS.

certifying to IPX5 [102] level waterproofing for protection of high voltage components in the vehicle. IPX5 is a waterproof rating that ensures protection against water ingress under sustained low pressure water jet stream (12.5 liters per minute at a pressure of 30 kilopascals (4.4 psi) from a distance of 3 meters) from any angle. The duration of the jet stream exposure is 1 minute per square meter surface area of the high voltage component.

- Warning—The vehicle has an electrical isolation loss warning system that warns the driver when electrical isolation falls below 100 ohms per volt for DC electrical components or 500 ohms per volt for AC electrical components. This option is available for individual countries to adopt if they so choose.

i. NHTSA Proposal

NHTSA tentatively concludes that the GTR No. 20's physical test option is a practical and feasible means of evaluating the effects of water exposure under normal vehicle operating conditions. It has advantages of a performance standard in assessing compliance over a documentation approach. Thus, the agency is not proposing the compliance option in GTR No. 20 of providing documentation on high voltage components meeting IPX5 level of protection.

Regarding the electrical isolation loss warning system option in GTR No. 20, NHTSA believes the warning signals alone are not sufficient for addressing loss of electrical isolation concerns. Where objective performance criteria are available and are appropriate for all types of vehicles to which the standard applies, NHTSA believes objective performance criteria should govern when compared to the approach of solely using a warning. The existence of the visual warning cannot necessarily be considered a safety prevention system, as the root cause of the safety hazard remains unaddressed, and the visual warning may be ignored by the driver. Although visual warning indicators triggered from an isolation monitoring system could help mitigate safety concerns, NHTSA believes that this approach is not sufficient to solely mitigate a shock or fire hazard caused by the effects of water exposure. Thus, the agency does not propose this alternative as a compliance option in FMVSS No. 305a.

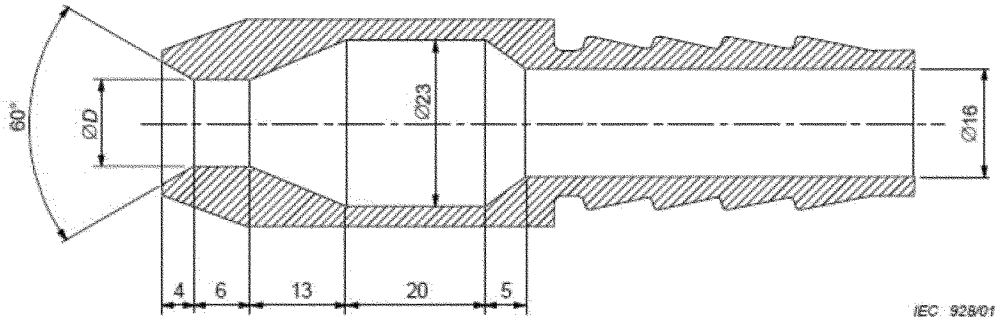
NHTSA Proposed Vehicle-Level Physical Test Procedures

The proposed physical test procedure is comprised of two series of tests, informally referred to as the ''vehicle washing'' test and the ''driving through standing water'' test. Electrical isolation is determined at the conclusion of each test, and once again after 24 hours.

A. Vehicle Washing Test

The washing test exposes the vehicle to a stream of water such as when washing a car. The vehicle external surface, including the vehicle sides, front, rear, top, and bottom is exposed to the water stream. GTR No. 20 excludes the vehicle underbody from exposure to the water stream. However, since the vehicle underbody is often exposed to water when the vehicle is washed, NHTSA proposes to also expose the vehicle underbody to the water stream to make this test more representative of vehicle washing. The areas of the vehicle that are exposed to the water stream in any possible direction include border lines, *i.e.,* a seal of two parts such as flaps, glass seals, outline of opening parts (windows, doors, vehicle inlet cover), outline of front grille and seals of lamps.

During the test, the vehicle is sprayed from any practicable directions with a stream of freshwater from a standard test nozzle as shown in Figure 4 below. The standard nozzle, with an internal diameter is 6.3 mm, shall provide a delivery rate of 11.9–13.2 liters/minute (l/min) with water pressure at the nozzle of 30–35 kilopascals (kPa) or 0.30–0.35 bar. These standard nozzle specifications are from IEC 60529 for IPX5 water jet nozzle.



Dimensions in millimetres

D is 6.3 mm as specified in (a) above.

Figure 4—Standard Nozzle (IEC 60529) for IPX5 Water Exposure Test

The vehicle surface is exposed to the water stream from the standard nozzle for a duration of 1 minute per square meter or for 3 minutes, whichever is greater. The distance from the nozzle to the tested vehicle is 3 meters, which may be reduced, if necessary, to ensure the surface is wet when spraying upwards.

After the ''vehicle washing'' test and with the vehicle surface still wet, electrical isolation is determined for high voltage sources in the same manner as that currently in S7.6 of FMVSS No. 305. The high voltage sources are required to meet the electrical isolation requirements as specified in S5.4.3 of current FMVSS No. 305.

Comments are requested on the merits of including the test in FMVSS No. 305a. NHTSA seeks comment on the representativeness of the washing test, including but not limited to the proposed test conditions (*e.g.,* 30–35

[102] IEC 60529:1989/AMD2:2013, ''Degrees of protection provided by enclosures (IP Code).'' *https://webstore.iec.ch/publication/2446.*

kPa versus 80–100 kPa water pressure conditions, water salinity levels, and water exposure durations, etc.).

B. Driving Through Standing Water Test

NHTSA proposes that vehicles should also be subjected to GTR No. 20's ''driving through standing water'' test. The vehicle is driven through a pool of standing freshwater,[103] 10 centimeters (cm) (4 inches) deep, for a total range of 500 meters (m), at a vehicle speed of 20 km/hr.[104] The pool represents a low-lying portion of a road that can get flooded in excessive rain. Meeting the test is a reasonable indication that the vehicle has safeguards to ensure electrical safety when driven through roads in inclement weather.

If the wade pool used is less than 500 m in length, then the vehicle is driven through the wade pool several times. The total time, including the periods outside the wade pool, would have to be less than 5 minutes. GTR No. 20 specifies a maximum test time of 10 minutes, but NHTSA believes that 5 minutes is preferable. Traversing 500 m at 20 km/hr takes 90 seconds. A maximum test duration of 10 minutes would allow for an excessive amount of time out of the water and may not be equivalent to a continuous 500 m exposure. NHTSA seeks comment on the maximum duration of this test. NHTSA also seeks comment on the availability and geometric dimensions of different types of wade pools (long rectangular, circular) to accomplish this type of test.

Just after the standing water test is completed and with the vehicle still wet, the vehicle would be required to meet the electrical isolation requirements now specified in FMVSS No. 305 S5.4.3 when tested in the same manner as described in S7.6 of current FMVSS No. 305. The vehicle is also required to meet the electrical isolation requirements that are in S5.4.3 of current FMVSS No. 305, 24 hours after the washing test and the standing water test are completed.

NHTSA seeks comment on the water salinity requirements for the physical tests as described above, including tolerances for the test parameters listed above.

ii. NHTSA's Consideration of Submersions

In the U.S., floods resulting from Hurricane Sandy (2012), Hurricane Harvey (2017) and Hurricane Ian (2022) have led to electric vehicles submerged in flood waters for varying periods of time, with varying reports of vehicle fires in the aftermath. In developing this NPRM, the agency considered whether it could propose requirements to address these types of vehicle submersions and the resulting risk of fire. NHTSA analyzed field data from these hurricanes and made the following key observations of vehicle fires resulting from the vehicle submersions:

(1) Not all electric vehicles submerged in floods catch on fire. The type of water (water salinity), the level of submersion, and duration of submersion are likely factors;

(2) Fire and other hazards are more likely after water exposure (days after flood waters recede) rather than during the exposure;

(3) Fire may not originate in the REESS and may spread to the REESS from another vehicle component; and

(4) While 12V systems may also short circuit and result in vehicle fire, fires involving lithium-ion REESS are more difficult to extinguish and more hazardous because of the self-oxygenating nature of the lithium-ion cells and the energy density of the REESS.

NHTSA evaluated the regulatory approaches taken by other countries to determine if such standards could assist NHTSA in addressing the challenges posed by the submersions and fires resulting from Hurricanes Sandy, Harvey, and Ian. NHTSA analyzed China and Korea's water exposure requirements but determined the focus of those standards do not appear to address the safety matter at issue. Key observations and findings from the field data in the U.S. and the exploratory investigation into the water exposure posed by the hurricanes suggest that the test procedure and parameters and the performance requirements in China GB–38031 [105] and the Korean Motor Vehicle Safety Standard (KMVSS) [106] may not be representative of field events of vehicle fires resulting from Hurricanes Sandy, Harvey, and Ian water exposure. If the standards are not representative of the harm NHTSA wishes to address from the hurricanes, the concern is the countermeasures to meet the performance test requirements of GB–38031 and KMVSS may not be effective at mitigating thermal events resulting from the water exposure at issue.[107]

Specifically, in both standards, the REESS is submerged in 3.5 percent salinity water representing seawater for a long period of time (two hours for GB–38031 and one hour for KMVSS). NHTSA's exploratory investigation of current REESS designs [108] suggests submersion in lower salinity water for a shorter duration may result in higher risk of thermal event. Longer immersion times in seawater salinity levels allow the batteries to safely discharge under water without adverse reactions such as arcing, venting, or underwater fires. Additionally, the requirements for no fire and explosion in these two standards are evaluated during the REESS immersion and not after the REESS is pulled out of the water. Such a requirement is not relevant to the electric vehicle fires observed after the flood waters in Hurricane Sandy and Hurricane Ian receded.

NHTSA acknowledges that the batteries in conventional vehicles with internal combustion engines (ICE) may also catch fire due to submersion. However, the post-submersion vehicle fires after Hurricane Ian demonstrated that electric vehicle fires are more difficult to put out and therefore more hazardous than ICE vehicle fires. NHTSA believes that a better understanding of the field incidences of electric vehicle fires is needed before a field relevant test and performance requirements can be developed that addresses the observed safety risks

[103] Freshwater means water containing less than 1,000 milligrams per liter of dissolved solids, most often salt.

[104] NHTSA tentatively concludes that the 10 cm (approximately four-inch) depth is reasonable, as national weather advisories (*https://www.weather.gov/tsa/hydro_tadd*) recommend not driving on flooded roads with more than four inches of water. Six inches of water on the road could reach the bottom of most passenger cars causing loss of control and possible stalling. A foot of water can float many vehicles.

[105] GB–38031 water immersion test contains two options. Option 1 is based on ISO–6469–1:2019 where the REESS is submerged in 1 meter of seawater (salinity of 3.5 percent) for two hours. The performance requirement for this test option is for no fire or explosion of the REESS during the submersion. Option 2 is based on ISO–20653, and requires IPX7 level waterproofing. In this test option, the REESS is completely submerged in regular water for 30 minutes such that the lower point of the battery is one meter below the surface or the highest point is 150 mm below the surface (for battery packs with a height greater than 850 mm). The performance requirement in this test option is for no water ingress, fire, or explosion, and the REESS maintains an electrical isolation of 100 ohms per volt after submersion. Option 1 of GB–38031 is intended for most current REESS (open-type or partially sealed) while Option 2 would necessitate a fully sealed REESS.

[106] KMVSS contains requirements for REESS, including a water immersion test that has been implemented in South Korea since 2009. In the water immersion test, the REESS is fully submerged in seawater (salinity of 3.5 percent) for one hour. The performance requirement in this test is for the REESS to not explode or catch on fire during the immersion. EVS19–E4WI–0300 [KR] Water Immersion Test.pptx. *https://wiki.unece.org/display/trans/EVS+19th+session.*

[107] For instance, NHTSA's understanding is that most of the vehicles involved in Hurricane Ian's post-submersion fires had met China GB–38031.

[108] Li-Ion Battery Pack Immersion Exploratory Investigation, DOT HS 813 136, July 2021. *https://rosap.ntl.bts.gov/view/dot/57013.*

associated with submersion of REESS and high voltage components in events such as floods.

The agency seeks comment on test conditions and test procedures that would address observed safety risks associated with submersion of REESS and high voltage components.

Going Forward

Shortly after Hurricane Ian, NHTSA and other DOT agencies coordinated with emergency personnel in Florida to collect in-depth information on vehicle fire incidences and REESSs involved in the flooding.[109] This activity and others like it provided critical information that informed approaches to better protect vehicle owners, responders, and other stakeholders in the future.

In the near term, as discussed in sections below, this NPRM proposes to require that electric vehicle manufacturers submit standardized emergency response information to a NHTSA central depository, to assist first and second responders to respond to emergencies as quickly and safely as possible. The agency tentatively concludes that such a requirement would be an important and achievable near-term measure that NHTSA and the industry can take to mitigate the harm from these fires as work continues on vehicle-based mitigation methods. As part of NHTSA's activity going forward, NHTSA will document EV battery conditions after catastrophic flooding events and will commence new research into mitigation methods. The agency will obtain data to develop and improve EV tests relevant to salt-water immersion.

5. Miscellaneous GTR No. 20 Provisions Not Proposed

There are several GTR No. 20 provisions for REESS performance during normal vehicle operations that NHTSA has not included in this NPRM. These provisions relate to requirements for: vibration, thermal shock and cycling, fire resistance, and low state-of-charge (SOC). Below is a description of the requirements and explanations of why NHTSA is proposing not to include the requirements. NHTSA requests comments on these views.

i. REESS Vibration Requirements

GTR No. 20 contains a vibration requirement and test procedure to verify the safety performance of the REESS under a prescribed sinusoidal vibration environment that applies a generic vibration profile to the tested vehicle. NHTSA believes the vibration profile accelerations and frequencies are unique for each vehicle model and so applying a generic vibration profile to all vehicle models may not be appropriate. Additionally, the vibration environment in the test specified in GTR No. 20 is applied only in the vertical direction while in real world driving conditions, the REESS is subject to vibration along all three orthogonal axes. Therefore, the agency tentatively concludes that the vibration test in GTR No. 20 is not representative of the actual vibration environment for different vehicle models, or representative of real-world conditions that the REESS experiences.

Furthermore, vibration appears sufficiently addressed through other means. The market addresses this matter, as manufacturers routinely perform vibration testing to ensure customer satisfaction and reliability. Vehicle manufacturers assess the durability of the vehicle and its components (not just the REESS) through various road conditions with full vehicle simulation, either by driving on a rough road test track or simulating the lifetime fatigue on a vibration rig. Further, at the component level, electric vehicle batteries are currently subject to similar vibration test requirements for transportation under the United States Hazardous Materials Regulations (HMR) [110] but along all three orthogonal axes and for frequencies up to 200 Hz.[111] Thus, NHTSA believes that the GTR No. 20 vibration test would not address an additional safety need beyond what is already provided by HMR.

For the reasons stated in the paragraph above, NHTSA is not proposing the vibration test at a component level or the vehicle level.[112] Currently, during Phase 2 development of GTR No. 20, there are discussions for updating the vibration test to include vibration in all three orthogonal axes and at higher amplitudes and frequency range. In Appendix B of this preamble, the agency seeks public comment on the work in Phase 2 on the vibration test.

ii. REESS Thermal Shock and Cycling

GTR No. 20's thermal shock and cycling requirement and test procedure aim to verify that the REESS is robust against thermal fatigue and contact degradation caused by temperature changes and potential incompatibilities of materials with varying thermal expansion characteristics.

At the component level, REESSs are already subject to thermal cycling test requirements for transportation under the HMR. 49 CFR 173.185 requires lithium-ion cells and batteries to comply with the test requirements in UN 38.3, including Test T2: Thermal test, which is the basis of the GTR No. 20 thermal shock and cycling test. In the UN38.3 Test T2, the REESS would be subject to temperature changes from −40 °C to +75 °C. This temperature range is greater than that prescribed in GTR No. 20. To avoid redundancy, NHTSA is not proposing the thermal shock and cycling test for the REESS. NHTSA tentatively concludes that incorporating the GTR No. 20 thermal shock and cycling test into FMVSS would not address additional safety needs beyond that already provided by HMR and 49 CFR 173.185. The agency seeks public comment on the safety need of a REESS thermal shock and cycling requirement, and requests commenters provide data to substantiate their comments and/or assertions.

iii. REESS Fire Resistance

This GTR No. 20 requirement is based on UN Regulation No. 34, ''Uniform provision concerning the approval of vehicles with regard to the prevention of fire risks,'' [113] which contains a fire resistance requirement for liquid fueled vehicle with plastic tanks. This test is required for REESSs installed in a vehicle at a height lower than 1.5 m above the ground and contain flammable electrolyte. During the test, the REESS is placed on a grating table positioned above the fire source in a pan. The pan filled with fuel is placed under the REESS in such a way that the distance between the level of the fuel in the pan and the bottom of the REESS corresponds to the design height of the REESS above the road surface at the unladed mass. The REESS is exposed directly to the flame for 70 seconds. A screen made of refractory material is then moved over the pan with the flame,

[109] NHTSA has purchased ten electric vehicles damaged during Hurricane Ian and plans to perform a teardown analysis to understand the root cause of the vehicle fires. The teardown analysis will inform the next steps to address the safety risks associated with vehicle submersions.

[110] 49 CFR parts 171 to 180, incorporated requirements for lithium batteries from UN 38.3 ''Transport of dangerous goods: manual tests and criteria.''

[111] 49 CFR 173.185 incorporated the vibration test 38.3.4.3 from the UN's ''Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria,'' *https://digitallibrary.un.org/record/483552?ln=en.*

[112] NHTSA and Transport Canada discussed in detail their positions for not including this vibration test during the development of GTR No. 20. See *https://wiki.unece.org/download/attachments/117508721/EVS21-E3VP-0101%5BOICA_UC_CA%5Dconsideration_of_vibration.pdf?api=v2.*

[113] UN Regulation No. 34. *https://unece.org/fileadmin/DAM/trans/main/wp29/wp29regs/2013/R034r2e.pdf.*

such that the REESS is indirectly exposed to the flame for an additional 60 seconds. The screen and pan are then moved away from the REESS. The REESS is observed until the surface temperature of the REESS has decreased to the ambient temperature of the test environment. During the test, the REESS shall exhibit no evidence of explosion.

NHTSA tentatively concludes that the short duration of the GTR No. 20 fire resistance test would not address any safety risks associated with explosion resulting from external fire to the battery pack. Transport Canada conducted full vehicle gasoline pool fire tests of electric powered vehicles and similar vehicles with internal combustion engines and found that there was no explosion in tests of vehicles with REESS and those without. The Transport Canada tests indicated that the short duration of the GTR No. 20 external fire test would not result in explosion.[114] During Phase 1 of the GTR No. 20 discussions, the United States and Canada noted that including the short duration component level test in GTR No. 20 would not address a safety need and recommended removing it from GTR No. 20.[115] For these reasons, NHTSA is tentatively not proposing the short duration fire resistance test from GTR No. 20. The agency seeks comment on excluding this fire resistance requirement from the FMVSS, and requests commenters provide data to substantiate their comments and/or assertions.

iv. Low State-of-Charge (SOC) Telltale

GTR No. 20 requires a telltale to the driver in the event of low REESS SOC.[116] The agency is tentatively not including this telltale requirement for electric powered vehicles because there is no corresponding low fuel warning requirement for conventional vehicles with internal combustion engines. Low-fuel telltales are presently provided in all conventional vehicles due to consumer demand. Similarly, all electric-powered vehicles already provide low SOC telltales due to consumer demand. NHTSA seeks comment on whether this GTR No. 20 requirement should be incorporated into proposed FMVSS No. 305a, and if yes, what the telltale should look like.

[114] *https://wiki.unece.org/download/attachments/29884786/EVSTF-07-02e.pdf?api=v2.*

[115] *https://wiki.unece.org/download/attachments/29884786/EVSTF-07-02e.pdf?api=v2.*

[116] The GTR does not standardize the appearance of the telltale.

IV. Request for Comment on Applying FMVSS No. 305a to Low-Speed Vehicles

Current FMVSS No. 305 applies to electric vehicles whose speed, attainable over a distance of 1.6 kilometers (km) (1 mile) on a paved level surface, is more than 40 km/h (25 miles per hour (mph)). It does not apply to vehicles that travel under 40 km/h (25 mph), such as low-speed vehicles.[117]

There are low-speed vehicles that are also electric-powered vehicles. NHTSA requests comments on applying aspects of FMVSS No. 305a to low-speed vehicles to ensure a level of protection against shock and fire, particularly during normal vehicle operation, and to assure the safe operation of the REESS. The agency requests comment on the possible applicability of FMVSS No. 305a to low-speed vehicles and its relevant safety needs, including any supporting research on low-speed vehicles.

V. Emergency Response Information To Assist First and Second Responders

Fires in electric vehicles are harder to extinguish than fires in vehicles with internal combustion engines and can reignite. These risks are also dependent on the specific vehicle design. Easy access to pertinent vehicle specific and emergency response information is vital for first and second responders when encountering electric vehicles. Safety is impeded when first and secondary responders are on scene but are delayed in their mitigation efforts because information on vehicle-specific safety mitigation methods are not easily accessible.

a. NTSB Report

In 2020, NTSB published a safety report following a detailed investigation of four electric vehicle fires.[118] The investigation identified safety risks to first and second responders [119] from exposure to high voltage components and from vehicle fire due to damaged cells in the REESS that could reignite as a result of stranded energy in the REESS.[120] The NTSB investigation further identified the lack of a clear and standardized format in vehicle manufacturers' emergency response guides (ERGs) [121] and inadequacy in the information provided in the ERGs for first and second responders to minimize safety risks posed by stranded energy in the REESS while handling electric vehicles.

NTSB issued recommendations to vehicle manufacturers, first and second responder organizations, and NHTSA. NTSB recommended manufacturers of electric vehicles to model their emergency response guides on International Standards Organization (ISO)–17840 [122] and SAE International recommended practice SAE J2990, ''Hybrid and EV first and second responder recommended practice.'' [123] It recommended incorporating vehicle-specific information on (1) extinguishing REESS fires, (2) mitigating risk of REESS reignition, (3) mitigating safety risks (electric shock and fire) associated with stranded energy during emergency response and transport of damaged vehicle, and (4) storing damaged electric vehicles.

NTSB recommended to the vehicle manufacturers to follow the practices for first and second emergency responders

[117] ''Low-speed vehicle'' is defined in 49 CFR 571.3. See also FMVSS No. 500, ''Low speed vehicles,'' 49 CFR 500.

[118] Three of the vehicle fires occurred following severe crashes that resulted in significant damage to the REESS casing. One vehicle fire was caused by internal failure of the REESS during normal driving operations. ''Safety risks to emergency responders from lithium-ion battery fires in electric vehicles,'' Safety Report NTSB/SR–20/01, PB2020–101011, National Transportation Safety Board, *https://www.ntsb.gov/safety/safety-studies/Documents/SR2001.pdf.*

[119] The NTSB report states, ''First responders in this context refers to firefighters, but emergency medical technicians, paramedics, and police officers are also classified as first responders. Second responders in this context refers to tow truck drivers or tow yard operators, but they can also include those responsible for temporary traffic control or other support functions at a crash site.''

[120] Stranded energy is the energy remaining inside the REESS after a crash or other incident. Cells in a compromised REESS could undergo thermal runaway at a later time and reignite the vehicle fire after firefighters extinguish the initial vehicle fire.

[121] Emergency Response Guides (ERGs) contain in-depth vehicle-specific information related to fire, submersion, leakage of fluids, towing, and storage of vehicles. The information is presented in a specific format with color-coded sections in a specific order to help first and second responders quickly identify pertinent rescue information. Rescue sheets contain abbreviated emergency response information about a vehicle's construction. Rescue sheets are most likely to be referenced first by emergency responders upon arrival at the scene of a crash. ERGs contain more information than rescue sheets.

[122] ISO–17840, ''Road vehicles—Information for first and second responders,'' consists of 4 parts: (1) Part 1 (2015): Rescue sheet for passenger cars and light commercial vehicles, (2) Part 2 (2019): Rescue sheet for buses, coaches, and heavy commercial vehicles, (3) Part 3 (2019): Emergency response guide template, and (4) Part 4 (2018): Propulsion energy identification. *https://webstore.ansi.org/standards/iso/iso178402015?gclid=Cj0KCQiAtbqdBhDvARIsAGYnXBMNT9mR9gjsrKxd5kK8dK6V21Ql9bDr8q2OI0fncMQHHpX_D8bQCxAaAhbUEALw_wcB.*

[123] SAE J2990 provides format and content recommendations for emergency response guides and quick reference sheets in accordance with ISO 17840. *https://www.sae.org/standards/content/j2990/2_202011/.*

available in SAE J2990 [124] and ISO–17840. SAE J2990 mainly refers to the ISO–17840 for the emergency response information. As indicated earlier, ISO–17840 is comprised of four parts:

- ISO 17840–1:2022(E) standardizes the content and layout of rescue sheets for passenger cars and light commercial vehicles.
- ISO 17840–2:2019(E) standardizes the rescue sheets for buses, coaches, and heavy commercial vehicles.
- ISO 17840–3:2019(E) establishes a template and defines the general content for manufacturers' emergency response guides for all vehicle types—longer documents that give in-depth ''necessary and useful information'' about a vehicle for emergency incidents.
- ISO 17840–4:2018 defines the labels and colors used to indicate the fuel or energy used to propel a vehicle for both the rescue sheets and the ERGs.

NTSB had two recommendations to NHTSA. The first recommendation was to factor the availability of a manufacturer's ERG and its adherence to ISO 17840 and J2990 when determining a vehicle's U.S. New Car Assessment Program (NCAP) score.[125] The second recommendation was to convene a coalition of stakeholders to continue research and publish the results on ways to mitigate or deenergize the stranded energy in high-voltage lithium-ion batteries and to reduce the hazards associated with thermal runaway resulting from high-speed, high-severity crashes.

NHTSA responded to NTSB by a letter dated April 2, 2021. Among other things, the letter said that NHTSA will be addressing risks to emergency responders by working directly with the emergency response community. The agency explained that NHTSA has partnered with the National Fire Protection Association (NFPA) to support the development of training to emergency responders on handling and managing fire incidents involving alternative fuel vehicles, including electric vehicles.[126] This NPRM is one result from our partnering with NFPA to provide emergency response guides to first and second responders.

NHTSA worked with other agencies and stakeholders and issued interim guidance in support of the development of training for emergency responders. In 2012 and 2014, NHTSA provided interim guidance to law enforcement, emergency medical services personnel and fire departments when encountering electric or hybrid-electric vehicles, to reduce the risk of shock hazards and vehicle fires following vehicle submersion.[127] NHTSA also provided separate interim guidance for towing and recovery operators and persons operating vehicle storage facilities.[128] NHTSA continues to lead an inter-agency [129] effort to develop updated guidance on best practices and strategies for emergency personnel to contain electric vehicle-related hazards from field events, such as electric vehicle fires resulting from storm surges like those occurring during Hurricane Ian.

b. NHTSA Proposal

The Information Must Be Provided

Current emergency response information is voluntarily filed on an NFPA website.[130] Rather than factoring the availability of ERGs as part of NCAP, NHTSA tentatively believes it would be more effective to address risks to emergency responders by directly requiring the standardized information. The information would be available and understandable to first and second responders so they can refer quickly and easily to identify pertinent vehicle-specific rescue information at the scene of the crash or fire event, and respond to the emergency quickly, effectively, and safely.

The Information Must Be Standardized

To improve the ease and flow of information and, ultimately, the safety of persons involved, NHTSA is proposing a requirement that vehicle manufacturers submit the emergency response information to NHTSA in a standardized format. Currently, the ERGs and rescue sheets for alternative fuel vehicles available on the NFPA website is not in a standardized format.[131] The NTSB report indicated that a standardized format for ERGs would enhance emergency response as well as protect first and second responders. NHTSA tentatively believes this NPRM's proposed standardization requirement would make the information more understandable and would be another means that would help reduce response times and the safety risks to emergency responders.

Proposed FMVSS No. 305a would require that the rescue sheets must follow the layout and format in ISO–17840–1:2022(E) (for vehicles with a GVWR less than or equal to 4,536 kg (10,000 lb)) and the format in ISO–17840–2:2019(E) (for vehicles with a GVWR greater than 4,536 kg (10,000 lb)). ERGs must follow the template layout and format of ISO–17840–3:2019(E) and provide in-depth information linked and aligned to the corresponding rescue sheet to support the quick and safe action of emergency responders. The ERGs must also provide in-depth information related to electric vehicle fire, submersion, leakage of fluids, towing, transportation, and storage.

NHTSA seeks comment on the proposed format and layout of rescue sheets and ERGs in accordance with the different parts of ISO–17840. Are there main features of ISO–17840 that should be considered instead of referring to specific versions of the ISO–17840 parts? Are there specific features not included in ISO–17840 that would further enhance first and second responders' operations?

The Information Must Be Vehicle-Specific

NHTSA tentatively believes that, due to varying electric vehicle design and development, emergency response information must be vehicle-specific. Currently, the ERGs and rescue sheets on the NFPA website are not available for all vehicle makes, models, and model years. NHTSA tentatively believes that the information is of limited value because of this limited availability. The agency tentatively believes that requiring information on all vehicles is necessary to best reduce response times and the safety risks to emergency responders.

[124] SAE J2990 recommended practice provides common procedures to help protect emergency responders and personnel supporting towing and/or recovery, storage, repair, and salvage after an incident has occurred with an electric powertrain vehicle.

[125] NHTSA's NCAP is a consumer information program that evaluates the safety performance of vehicles and provides comparative information on new vehicles. NCAP also provides consumers with information on the availability of new vehicle safety features. This information is provided to assist consumers with vehicle purchasing decisions and to encourage safety improvements in vehicle design.

[126] *https://www.nhtsa.gov/sites/nhtsa.gov/files/2021-12/NHTSA-NTSB-Response-04-02-2021-Stranded-Energy-Lithium-Ion-Batteries-NCAP-Improvements-tag.pdf.*

[127] *Interim Guidance for Electric and Hybrid-Electric Vehicles Equipped with High-Voltage Batteries* (located at *https://www.nhtsa.gov/sites/nhtsa.gov/files/811575-interimguidehev-hv-batt_lawenforce-ems-firedept-v2.pdf*).

[128] ''Interim Guidance for Electric and Hybrid-Electric Vehicles Equipped with High-Voltage Batteries,'' located at *811576-interimguidehev-hv-batt_towing-recovery-storage-v2.pdf* (*nhtsa.gov*).

[129] U.S. Department of Energy, the United States Fire Administration, and the National Fire Protection Association.

[130] *https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training/Emergency-Response-Guides.*

[131] *https://www.nfpa.org/Training-and-Events/By-topic/Alternative-Fuel-Vehicle-Safety-Training/Emergency-Response-Guides.*

The Information Must Be Submitted to NHTSA

NHTSA tentatively believes that easy access to both short and long forms of emergency response information are essential to address the risk of emergency responders. Therefore, as part of this NPRM and the NHTSA's battery safety initiative,[132] NHTSA is proposing a provision in FMVSS No. 305a that would require vehicle manufacturers to submit electronic versions of ERGs and rescue sheets for all vehicles to which FMVSS No. 305a applies, prior to certification of the vehicle, so that they are available in a centralized location on NHTSA's website. The rationale of submission prior to certification is to ensure the pertinent information for first and second responders are available by the time the vehicles are placed on public roads and potentially involved in emergencies. The intent is for both the ERGs and rescue sheets to be stored and maintained at a centralized web location (within NHTSA.gov), so that they are always easily and quickly accessible to all first and second responders.

Other Issues Presented for Comment

- To align with NHTSA's intent to have both ERGs and rescue sheets accessible in a centralized NHTSA web location, NHTSA would like to migrate the ERGs currently on the NFPA website to NHTSA's website. NHTSA requests comments on whether electric vehicle ERGs and rescue sheets that were previously hosted on the NFPA website should be included in NHTSA's centralized web location.

- NHTSA also requests comments on whether the requirement described in this section for ERGs and rescue sheets would be better placed in a general agency regulation than in proposed FMVSS No. 305a. NHTSA discusses this issue at length in section VI. of this preamble regarding documentation requirements pertaining to REESS safety risks and risk mitigation strategies identified by manufacturers. NHTSA requests comments on the pros and cons of having the ERGs and rescue sheet requirements in a regulation rather than in FMVSS No. 305a. Comments are requested on the pros and cons of placing the requirement for providing ERG and rescue sheets to NHTSA to be in a regulation rather than in FMVSS No. 305a.

[132] *https://www.nhtsa.gov/battery-safety-initiative.*

VI. Request for Comment on Placing the Emergency Response Information and Documentation Requirements in a Regulation Rather Than in FMVSS No. 305a

NHTSA requests comments on whether the proposed emergency response information requirements would be better placed in a general agency regulation than in proposed FMVSS No. 305a, given that the documentation specifications are more akin to a disclosure requirement (disclosing information to NHTSA) than a performance test or a consumer safety information requirement.

NHTSA regulates motor vehicle safety under many grants of authority. For example, one is that NHTSA is authorized by the Vehicle Safety Act to issue FMVSS; a typical FMVSS specifies minimum performance requirements and may also include provisions requiring manufacturers to provide consumers safety information on properly using a safety system or item of equipment. Another is that the Vehicle Safety Act authorizes NHTSA to require manufacturers to retain certain records and/or make information available to NHTSA. Section 30166 of the Act provides NHTSA the ability to request and inspect manufacturer records that are necessary to enforce the prescribed regulations. NHTSA is also authorized by delegation to issue regulations to carry out the agency's duties of ensuring vehicle safety.[133] Documentation requirements would be authorized under these authorities.

However, NHTSA is mindful that the mechanisms for enforcing a failure to meet a documentation requirement could differ depending on whether the requirement is in an FMVSS or not. Section 30118 of the Vehicle Safety Act (49 U.S.C. 30118) provides that whenever the Secretary of Transportation (NHTSA by delegation) determines that a vehicle does not comply with an FMVSS, NHTSA (by delegation) must require the vehicle's manufacturer to notify the owners, purchasers and dealers of the vehicle or equipment of the noncompliance and remedy the noncompliance. There is an exception to the recall requirement in section 30120(h) which authorizes NHTSA to exempt noncompliances from recall provisions based on a demonstration that the noncompliance is inconsequential to safety. In the case of a violation of a disclosure requirement in a regulation other than an FMVSS, the manufacturer could be subject to injunctive remedies and/or civil penalties,[134] but would not be subject to the recall notification and remedy provision described above. NHTSA requests comments on the pros and cons of placing the proposed emergency response information requirement in a regulation rather than in FMVSS No. 305a.

NHTSA also seeks comments on whether the proposed risk mitigation documentation requirements would be better placed in a general agency regulation. This NPRM proposes manufacturers to document and submit information, upon request, describing identified safety risks, risk mitigation strategies, and validation of those strategies. NHTSA has similar documentation requirements in FMVSS No. 126, ''Electronic stability control systems for light vehicles'' [135] and FMVSS No. 226, ''Ejection Mitigation.'' [136] NHTSA requests comments on the pros and cons of placing the proposed risk mitigation documentation requirement in a regulation rather than in FMVSS No. 305a.

VII. Proposed Compliance Dates

The proposed compliance dates are as follows.

1. Regarding the proposed requirements other than the emergency response information to assist first and second responders, the compliance date would be two years after the publication of the final rule in the **Federal Register**. Small-volume manufacturers, final-stage manufacturers, and alterers would be provided an additional year to comply with the final rule beyond the two-year date identified above.[137] We propose to permit optional early compliance with the final rule.

Under § 30111(d) of the Safety Act, a standard may not become effective before the 180th day after the standard is prescribed or later than one year after it is prescribed, unless NHTSA finds, for good cause shown, that a different effective date is in the public interest and publishes the reasons for the finding. NHTSA has tentatively determined that a 2-year compliance period is in the public interest because all vehicle manufacturers need to gain familiarity with the proposed REESS requirements. There is already widespread conformance to the requirements so the 2-year period ought

[133] 49 U.S.C. 322(a). This provision states that the Secretary of Transportation may prescribe regulations to carry out the duties and powers of the Secretary. The authority to implement the Vehicle Safety Act has been delegated to NHTSA.

[134] See, *e.g.,* 49 U.S.C. 30165.

[135] 49 CFR 571.126 S5.6.

[136] 49 CFR 571.226 S4.2.4.

[137] 49 CFR 571.8(b).

to provide sufficient time, but some manufacturers may need time to assess fleet performance, review their risk management procedures and document their mitigation strategies. Further, heavy vehicle manufacturers would be newly subject to electric system integrity requirements having not been subject to existing FMVSS No. 305. They will need time to assess their vehicles' conformance to FMVSS No. 305a requirements, implement appropriate design and production changes, and assess and document risk mitigation strategies.

2. Regarding requirements to provide emergency response information to assist first and second responders, the proposed compliance date is one year after publication of the final rule. Small-volume manufacturers, final-stage manufacturers, and alterers would be provided an additional year to comply with the final rule. Optional early compliance would be permitted. NHTSA believes the 1-year compliance date for this proposed requirement is long enough for manufacturers to provide the information to NHTSA in the required format. They are already providing the information voluntarily to the NFPA. The agency would like to provide the information on NHTSA's website as soon as possible. If manufacturers provide the information in a year, NHTSA can begin the process of posting the information shortly thereafter.

VIII. Rulemaking Analyses and Notices

Executive Order 12866, Executive Order 14094, Executive Order 13563, and DOT Order 2100.6A

NHTSA has considered the impact of this rulemaking action under Executive Orders 12866, 14094, and 13563 and DOT Order 2100.6A. This action was not reviewed by the Office of Management and Budget under E.O. 12866.

This NPRM proposes to update FMVSS No. 305 to incorporate the electrical safety requirements in GTR No. 20 and issue FMVSS No. 305a with the incorporated requirements. Most of GTR No. 20 has already been adopted into FMVSS No. 305; this NPRM proposes to complete the process by expanding FMVSS No. 305's applicability to heavy vehicles and by adopting the GTR's requirements for the REESS. Since there is widespread conformance with the requirements that would apply to existing vehicles, we anticipate no costs or benefits associated with this rulemaking.

This NPRM also proposes a requirement that electric vehicle manufacturers submit standardized emergency response information to a NHTSA central depository, to assist first and second responders. A comprehensive list of pertinent vehicle specific rescue information at a central location will enable first and second responders to respond to emergencies as quickly and safely as possible. Currently, electric vehicle manufacturers voluntarily upload emergency response information to the National Fire Protection Association's training site, so manufacturers are already providing vehicle specific emergency response information. With this proposed rule, manufacturers would submit ERGs and rescue sheets to NHTSA instead. We anticipate no additional costs by the manufacturers.

Regulatory Flexibility Act

NHTSA has considered the effects of this NPRM under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.,* as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996). I certify that this NPRM, if promulgated, would not have a significant economic impact on a substantial number of small entities. NHTSA is aware of 3 small manufacturers of light and heavy electric vehicles. NHTSA believes that this proposed rule would not have a significant economic impact on these manufacturers for the following reasons. First, small manufacturers of light electric vehicles that might be affected by this NPRM are already subject to the electric vehicle safety requirements of FMVSS No. 305 and have been certifying compliance to the standard for years. They are familiar with FMVSS requirements for electric vehicle safety, know how to assess the conformance of their vehicles with the requirements, and know how to certify their vehicles to the FMVSS. The new proposed requirements for the REESS are manageable because the overcharge, over-discharge, over-current, over-temperature, and external short-circuit tests are non-destructive tests and can be conducted in serial order. The documentation requirements for safety risk mitigation associated with charging and discharging during cold temperature, safety risk mitigation associated with an internal short-circuit in a single cell of a REESS, and warning in the event of a malfunction of the vehicle controls that manage REESS safe operation are not design restrictive and add minimal cost. The documentation requirements simply ask manufacturers to describe to NHTSA how they have assessed certain safety risks and mitigated them.

Second, there already is widespread voluntarily compliance by the manufacturers with GTR No. 20, which is also aligned with industry standards. Therefore, there will be only a minor economic impact.

Finally, although the final certification would be made by the manufacturer, this proposal would allow one additional year for small volume manufacturers, final-stage manufacturers and alterers to comply with a final rule. This approach is similar to the approach NHTSA has taken in other rulemakings in recognition of manufacturing differences between larger and smaller manufacturers. NHTSA anticipates that EV components meeting FMVSS No. 305a would be developed by vehicle designers and suppliers and integrated into the fleets of larger vehicle manufacturers first, before small manufacturers. This NPRM recognizes this and proposes to provide smaller manufacturers flexibility, so they have time to obtain the equipment and work with the suppliers after the demands of the larger manufacturers are met.

This NPRM would apply proposed FMVSS No. 305a to heavy vehicles, so this NPRM would also affect manufacturers of vehicles of over 4,536 kg (10,000 lb) GVWR, some of which may be final-stage manufacturers.[138] According to the U.S. Census, there are 570 small businesses in body manufacturing for light, medium, and heavy-duty classes. This proposal could affect a substantial number of final stage manufacturers that are small businesses. However, it is NHTSA's understanding that these small entities rarely make modifications to a vehicle's REESS system and instead rely upon the pass-through certification provided by the first-stage manufacturer, which is not typically a small business. The same is true for alterers, which are manufacturers that obtain and alter a complete vehicle prior to the vehicle's first sale to a consumer.[139] Furthermore, even if the final-stage manufacturer or alterer must make the certification independently, as explained above this

[138] Final-stage manufacturers produce vehicles by obtaining an incomplete vehicle (comprising the chassis and other associated parts) manufactured by an incomplete vehicle manufacturer, which is typically a large manufacturer. The final-stage manufacturer produces a vehicle by installing the vehicle body on the incomplete vehicle. The final-stage manufacturer typically certifies a complete vehicle by staying within manufacturing instructions provided by the incomplete vehicle manufacturer.

[139] Alterers certify that the vehicle was altered by them and as altered conforms to all applicable FMVSS, bumper, and theft prevention standards affected by the alteration.

certification responsibility is manageable. The proposed requirements do not involve crash testing (except for heavy school buses, as discussed below), and conformance with the requirements can be assessed relatively simply in a laboratory setting. And finally, this proposal would further accommodate final-stage manufacturers and alterers by providing them an additional year before compliance is required.[140] For the reasons above, NHTSA does not believe that the economic impacts of this proposal on small entities would be significant.

With regard to the proposed crash test requirement for small manufacturers of heavy school buses, the additional requirement is for heavy school buses with high voltage electric propulsion systems to meet post-crash electrical safety requirements when impacted by the moving contoured barrier specified in FMVSS No. 301. This requirement does not require additional crash testing and aligns the applicability of FMVSS No. 305a with that of FMVSS Nos. 301 and 303. Per FMVSS No. 301 and FMVSS No. 303, heavy school buses (school buses with a GVWR greater than 4,536 kg) using conventional fuel or compressed natural gas for propulsion are required to maintain fuel system integrity in a crash test where the moving contoured barrier specified in FMVSS No. 301 traveling at any speed up to 48 km/h impacts the school bus at any point and angle. These requirements ensure post-crash safety to maintain the current high safety standards for school buses. Finally, this proposal would accommodate small manufacturers and final stage manufacturers of heavy school buses by providing them an additional year before compliance is required. For the reasons above, NHTSA does not believe that the economic impacts of this proposal on small entities would be significant.

National Environmental Policy Act

NHTSA has analyzed this rulemaking action for the purposes of the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), as amended. The agency has determined that implementation of this action will not have an adverse impact on the quality of the human environment. As described earlier, the proposal includes the current requirements in FMVSS No. 305 but would also expand the applicability of the standard to heavy vehicles (vehicles with a gross vehicle weight rating (GVWR) greater than 4,536 kilograms (kg) (10,000 lb)), add requirements to mitigate post-crash vehicle fires, add an optional method for assessing electrical safety for capacitors included in the electric powertrain, and include crash test and post-crash safety requirements for school buses with a GVWR greater than 4,536 kg (10,000 lb). The proposal would align the standard with electrical safety requirements in the Global Technical Regulation (GTR) No. 20, ''Electric Vehicle Safety,'' which has been formally adopted by the UN World Forum for Harmonization of Vehicle Regulations. The proposal, with expanded applicability and additional requirements and test procedures, would enable future updates to the standard as battery technologies and charging systems continue to evolve.

NHTSA expects the changes to new and existing vehicles to be minimal, and mitigating the hazards associated with electric shock during parked conditions, active drive-possible modes, external charging, and post-crash events, as well as risks associated with hazardous conditions resulting from battery fires and emissions, would result in a public health and safety benefit. For these reasons, the agency has determined that implementation of this action will not have any adverse impact on the quality of the human environment.

Executive Order 13132 (Federalism)

NHTSA has examined this proposed rule pursuant to Executive Order 13132 (64 FR 43255; Aug. 10, 1999) and concluded that no additional consultation with States, local governments, or their representatives is mandated beyond the rulemaking process. The agency has concluded that the proposal does not have sufficient federalism implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The proposal does not have ''substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.''

NHTSA rules can have preemptive effect in two ways. First, the National Traffic and Motor Vehicle Safety Act contains an express preemption provision: When a motor vehicle safety standard is in effect under this chapter, a State or a political subdivision of a State may prescribe or continue in effect a standard applicable to the same aspect of performance of a motor vehicle or motor vehicle equipment only if the standard is identical to the standard prescribed under this chapter. 49 U.S.C. 30103(b)(1). It is this statutory command that preempts any non-identical State legislative and administrative law address the same aspect of performance.

The express preemption provision described above is subject to a savings clause under which ''[c]compliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.'' 49 U.S.C. 30103(e). Pursuant to this provision, State common law tort causes of action against motor vehicle manufacturers that might otherwise be preempted by the express preemption provision are generally preserved. However, the Supreme Court has recognized the possibility, in some instances, of implied preemption of State common law tort causes of action by virtue of NHTSA's rules—even if not expressly preempted.

This second way that NHTSA rules can preempt is dependent upon the existence of an actual conflict between an FMVSS and the higher standard that would effectively be imposed on motor vehicle manufacturers if someone obtained a State common law tort judgment against the manufacturer—notwithstanding the manufacturer's compliance with the NHTSA standard. Because most NHTSA standards established by an FMVSS are minimum standards, a State common law tort cause of action that seeks to impose a higher standard on motor vehicle manufacturers will generally not be preempted. However, if and when such a conflict does exist—for example, when the standard at issue is both a minimum and a maximum standard—the State common law tort cause of action is impliedly preempted. See *Geier* v. *American Honda Motor Co.,* 529 U.S. 861 (2000).

Pursuant to Executive Order 13132, NHTSA has considered whether this proposed rule could or should preempt State common law causes of action. The agency's ability to announce its conclusion regarding the preemptive effect of one of its rules reduces the likelihood that preemption will be an issue in any subsequent tort litigation.

To this end, the agency has examined the nature (*e.g.,* the language and structure of the regulatory text) and objectives of this proposed rule and does not foresee any potential State requirements that might conflict with it. NHTSA does not intend that this proposed rule preempt state tort law that would effectively impose a higher standard on motor vehicle manufacturers than that established by this proposed rule. Establishment of a higher standard by means of State tort law would not conflict with the

[140] See 49 CFR 571.8(b).

standards proposed in this NPRM. Without any conflict, there could not be any implied preemption of a State common law tort cause of action.

Executive Order 12988 (Civil Justice Reform)

With respect to the review of the promulgation of a new regulation, section 3(b) of Executive Order 12988, ''Civil Justice Reform'' (61 FR 4729; Feb. 7, 1996), requires that Executive agencies make every reasonable effort to ensure that the regulation: (1) Clearly specifies the preemptive effect; (2) clearly specifies the effect on existing Federal law or regulation; (3) provides a clear legal standard for affected conduct, while promoting simplification and burden reduction; (4) clearly specifies the retroactive effect, if any; (5) specifies whether administrative proceedings are to be required before parties file suit in court; (6) adequately defines key terms; and (7) addresses other important issues affecting clarity and general draftsmanship under any guidelines issued by the Attorney General. This document is consistent with that requirement.

Pursuant to this Order, NHTSA notes as follows. The issue of preemption is discussed above. NHTSA notes further that there is no requirement that individuals submit a petition for reconsideration or pursue other administrative proceedings before they may file suit in court.

Privacy Act

Please note that anyone is able to search the electronic form of all comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477–78), or online at *http://www.dot.gov/privacy.html.*

Paperwork Reduction Act

Under the procedures established by the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501, et. seq.), Federal agencies must obtain approval from the OMB for each collection of information they conduct, sponsor, or require through regulations. A person is not required to respond to a collection of information by a Federal agency unless the collection displays a valid OMB control number. The Information Collection Request (ICR) for the proposed new information collection described below have been forwarded to OMB for review and comment. In compliance with these requirements, NHTSA asks for public comments on the following proposed collections of information for which the agency is seeking approval from OMB.

There are two types of collection of information that are part of the proposed FMVSS No. 305a requirements: (1) Electric Vehicles: Rescue Sheets and Emergency Response Guides and (2) Electric Vehicles: REESS Thermal Propagation Safety Risk Analysis and Mitigation Documentation.

Title: FMVSS No. 305a Electric Vehicle Emergency Response Information and Risk Mitigation Documentation.

OMB Control Number: New.

Form Number: N/A.

Type of Request: Approval of a new collection.

Type of Review Requested: Regular.

Requested Expiration Date of Approval: 3 years from the date of approval.

Summary of the Collection of Information:

FMVSS No. 305a proposes electric vehicle (EV) requirements for protection from harmful electric shock, fire, explosion, and gas venting during normal vehicle operation and during and after a crash. As part of the proposed requirements, there are two types of information collection that would apply to all electric vehicle (EV) manufacturers. First, before certification, each manufacturer will be required to submit emergency response information, including rescue sheets and emergency response guides (ERGs) for each vehicle make, model, and model year, so they are available in a centralized location on NHTSA's website. The information would then be readily available for first and second responders so they can easily identify pertinent vehicle-specific rescue information at the scene of a vehicle crash or fire event, and respond to the emergency quickly, effectively, and safely.

Second, each electric vehicle model will be required to meet three proposed documentation requirements and manufacturers will be required to submit to NHTSA, upon request, documentation demonstrating risk mitigation for certain safety hazards. The documentation must describe safety risk mitigation associated with charging and discharging during cold temperature, safety risk mitigation associated with an internal short-circuit in a single cell of a REESS, and warning in the event of a malfunction of the vehicle controls that manage REESS safe operation.

Description of the Need for the Information and Proposed Use of the Information:

First responders need detailed information pertaining to an EV's electrical system layout in order to safely work around the vehicle and extricate injured passengers. Access to vehicle-specific information in a clear, standardized format help mitigate the safety risks of high voltage components and stranded energy in the Rechargeable Electrical Energy Storage System (REESS). The purpose of the requirement is to make this information readily available for first and second responders for their safe handling of the vehicle in emergencies and for towing and storing operations. Rescue sheets and ERGs communicate vehicle-specific information related to fire, submersion, and towing, as well as the location of components in the vehicle that may expose the vehicle occupants or rescue personnel to risks. The information is presented in a specific format with color-coded sections in a specific order to help first and second responders quickly identify pertinent rescue information. Rescue sheets contain abbreviated emergency response information about a vehicle's construction. Rescue sheets are most likely to be referenced first by emergency responders upon arrival at the scene of a crash. ERGs contain more information than rescue sheets.

Current emergency response information is voluntarily filed on the National Fire Protection Association (NFPA) website, but they are not in standardized format. The uploaded rescue sheets and ERGs would be standardized in layout and format and be publicly available at NHTSA's website for quick access.

There are currently no objective test procedures to evaluate REESS mitigation of certain safety risks in a manner that is not design restrictive. Until test procedures and performance criteria can be developed for all vehicle powertrain architectures, the proposed FMVSS No. 305a would require manufacturers to compile and meet three of the proposed documentation requirements and submit documentation to NHTSA, if requested, that identifies all known safety hazards, the risk mitigation strategies for the safety hazards, and, if applicable, describe how they provide a warning to address a safety hazard. Given the variation of battery design and design-specific risk mitigation systems, the documentation is a means for manufacturers to show that they have identified and demonstrated safety risk mitigation strategies, and for NHTSA to

learn of and oversee the safety hazards. This approach is battery technology neutral, not design restrictive, and is intended to evolve over time as battery technologies continue to rapidly evolve. These proposed documentation requirements would address: (a) safety risk mitigation associated with charging and discharging during low temperature; (b) the safety risks from thermal propagation in the event of SCTR due to an internal short-circuit of a single cell; and (c) providing a warning if there is a malfunction of vehicle controls that manage REESS safe operation.

Affected Public: Vehicle manufacturers.

Frequency: Emergency response information: as needed upon certification; Risk mitigation documentation: annually for recordkeeping.

Number of Responses: It is anticipated that an estimated 205 rescue sheets and ERGs will be submitted each year and all 205 unique models would be compiling and maintaining the required documentation annually.

Electric vehicle models encompass battery-powered electric vehicle, plug-in hybrid electric vehicle, hybrid electric vehicle, and fuel cell electric vehicle models. The combined number of electric vehicle models is estimated to be 205 unique models each year. Upon certification, a total of 205 rescue sheets and ERGs for all unique models will be submitted. Out of the 205 EV models, about 51 (25% of EV models) likely already have rescue sheets and ERGs that conform to the proposed requirements. The number of new rescue sheets and ERGs that would be required to be compiled and submitted to NHTSA before certification is estimated to be 51 (25% of the combined EV models sold each year). NHTSA also anticipates updates to existing or previously submitted rescue sheets and ERGs for some vehicle models. Updates may be necessary when a vehicle model changes between model years or there are revisions to an existing model's emergency response information. It is estimated that approximately 103 (50% of the 205 annual electric vehicle models) electric vehicle models sold each year would have updated or revised rescue sheets and ERGs. Because rescue sheets and emergency response guides often cover several model years, the percentage of models that would be needing new or updates to existing or previously submitted rescue sheets and ERGs are likely to decrease after the second year of the effective date.

Estimated Total Annual Burden Hours: 16,241 hours (2,506 hours for emergency response information and 13,735 hours for risk mitigation documentation).

For vehicle models that already have rescue sheets and ERGs that conform to the proposed requirements, it is estimated to take 0.25 hour to submit the required emergency response information to NHTSA's website. The estimated burden hours for the 51 EV models to submit their conformed rescue sheets and ERGs is 13 hours (0.25 hour/model × 51 models).

For each new electric vehicle model, it is anticipated that it will take approximately 36 hours to complete the vehicle-specific rescue sheet and emergency response guide following the required format and layout provided in ISO–17840–1:2022, ISO–17840–2:2019, and ISO–17840–3:2019. The estimated total annual burden hours for new rescue sheets and emergency response guides is 1,849 hours (36.25 hours/model × 51 models).

It is anticipated that it will take approximately 6 hours to update the rescue sheet and emergency response guide for a vehicle model. The estimated total annual burden hours for updated rescue sheets and emergency response guides is 644 hours (6.25 hours/model × 103 models). The estimated total annual burden hours is 2,506 hours.

For each vehicle model, vehicle manufacturers will need an estimated 67 hours to complete the three documentation requirements (17 hours to complete the documentation for low temperature operation safety, 17 hours for the documentation about warning in the event of operational failure of REESS vehicle controls, and 33 hours for the documentation covering thermal runaway due to internal short in a single cell of the REESS). After the proposed rule's effective date, all 205 vehicle models are expected to compile the necessary information to meet the three proposed documentation requirements. The total estimated annual burden hours for the three documentation requirements is an estimate of 13,735 hours (205 vehicle models × 67 hours).

Estimated Total Annual Burden Cost: $1,027,381 ($157,543 for emergency response information and $869,838 for risk mitigation documentation).

The preparation of information is anticipated to be done by a technical writer. The U.S. Bureau of Labor Statistics (BLS) estimates the mean hourly wage for technical writers in the motor vehicle manufacturing industry as $44.71.[141] The BLS estimates that private industry workers' wages account for 70.6% of a worker's total compensation.[142] Therefore, NHTSA estimates the hourly labor costs to be $63.33 ($44.71/hour/70.6%). The submission of information is anticipated to be done by an administrative professional. The U.S. BLS estimates the mean hourly wage for administrative professional in the motor vehicle manufacturing industry is $29.36.[143] Therefore, NHTSA estimates the hourly labor costs for submission to be $41.59 ($29.36/hour/70.6%).

These estimates produce an annual cost burden to manufacturers of $116,804 (51 models × ((36 hours × $63.33) + (0.25 hour × $41.59)) for generating and submitting the emergency response information documentation for new models, $40,209 (103 models × ((6 hours × $63.33) + (0.25 hour × $41.59)) for updating and submitting the documentation, and $530 (51 models × (0.25 hour × $41.59)) for those EV models that already conform to the proposed requirements for submission. The total labor cost to prepare and submit the emergency response information documentation to NHTSA's website is estimated to be $157,543 annually.

Because rescue sheets and emergency response guides often cover several model years, the percentage of models that would be needing new or updates to existing or previously submitted rescue sheets and ERGs each year are likely to decrease in subsequent years. This would result in a reduction in annual total burden hours and annual total burden costs.

The preparation of the risk mitigation documentation is also anticipated to be done by a technical writer. The total cost burden for manufacturers for compiling and record keeping the three documentation packets would be $869,838 (205 vehicle models × (67 hours × $63.33)).

The estimated total annual burden hours to manufacturers for the proposed FMVSS No. 305a emergency response information and documentation requirements would be 16,241 hours.

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[141] *See* May 2022 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 336100—Motor Vehicle Manufacturing, available at *https://www.bls.gov/oes/current/naics4_336100.htm* (accessed February 29, 2024).

[142] *See* Table 1. Employer Costs for Employee Compensation by ownership (Sept. 2023), available at Table 1. By ownership—2023 Q03 Results (*bls.gov*).

[143] *See* May 2022 National Industry-Specific Occupational Employment and Wage Estimates, NAICS 336100—Motor Vehicle Manufacturing, available at *https://www.bls.gov/oes/current/naics4_336100.htm* (accessed February 29, 2024).

The estimated total annual cost burden to manufacturers for the proposed FMVSS No. 305a emergency response information and documentation requirements would be $1,027,381.

Public Comments Invited: You are asked to comment on any aspects of this information collection, including (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Department, including whether the information will have practical utility; (b) the accuracy of the Department's estimate of the burden of the proposed information collection; (c) ways to enhance the quality, utility and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including the use of automated collection techniques or other forms of information technology.

Please submit any comments, identified by the docket number in the heading of this document, by the methods described in the **ADDRESSES** section of this document to NHTSA and OMB. Although comments may be submitted during the entire comment period, comments received within 30 days of publication are most useful.

National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, as amended by Public Law 107–107 (15 U.S.C. 272), directs the agency to evaluate and use voluntary consensus standards in its regulatory activities unless doing so would be inconsistent with applicable law or is otherwise impractical. Voluntary consensus standards are technical standards (*e.g.,* materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies, such as the Society of Automotive Engineers (SAE). The NTTAA directs us to provide Congress (through OMB) with explanations when the agency decides not to use available and potentially applicable voluntary consensus standards.

This proposal to adopt GTR No. 20 is consistent with the goals of the NTTAA. This NPRM proposes to adopt a global consensus standard. The GTR was developed by a global regulatory body and is designed to increase global harmonization of differing vehicle standards. The GTR leverages the expertise of governments in developing a vehicle standard to increase electric vehicle safety, including the performance of the REESS. NHTSA's consideration of GTR No. 20 accords with the principles of NTTAA as NHTSA's consideration of an established, proven global technical regulation has reduced the need for NHTSA to expend significant agency resources on the same safety need addressed by GTR No. 20.

Unfunded Mandates Reform Act

Section 202 of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, requires Federal agencies to prepare a written assessment of the costs, benefits, and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local, or tribal governments, in the aggregate, or by the private sector, of more than $100 million annually (adjusted for inflation with base year of 1995). Adjusting this amount by the implicit gross domestic product price deflator for the year 2022 results in $177 million (111.416/75.324 = 1.48). This NPRM would not result in a cost of $177 million or more to either State, local, or tribal governments, in the aggregate, or the private sector. Thus, this NPRM is not subject to the requirements of sections 202 of the UMRA.

Executive Order 13609 (Promoting Regulatory Cooperation)

The policy statement in section 1 of Executive Order 13609 provides, in part: The regulatory approaches taken by foreign governments may differ from those taken by U.S. regulatory agencies to address similar issues. In some cases, the differences between the regulatory approaches of U.S. agencies and those of their foreign counterparts might not be necessary and might impair the ability of American businesses to export and compete internationally. In meeting shared challenges involving health, safety, labor, security, environmental, and other issues, international regulatory cooperation can identify approaches that are at least as protective as those that are or would be adopted in the absence of such cooperation. International regulatory cooperation can also reduce, eliminate, or prevent unnecessary differences in regulatory requirements.

The agency participated in the development of GTR No. 20 to harmonize the standards of electric vehicle. As a signatory member, NHTSA is proposing to incorporate electrical safety requirements and options specified in GTR No. 20 into FMVSS No. 305a.

Incorporation by Reference

Under regulations issued by the Office of the Federal Register (1 CFR 51.5(a)), an agency must summarize in the preamble of a proposed or final rule the material it incorporates by reference and discuss the ways the material is reasonably available to interested parties or how the agency worked to make materials available to interested parties.

NHTSA proposes to incorporate by reference three documents into the Code of Federal Regulations. The first document is ISO 17840–1:2022 (E), ''Road vehicles—Information for first and second responders—Part 1: Rescue sheet for passenger cars and light commercial vehicles.'' ISO 17840–1:2022(E) standardizes the content and layout of rescue sheets for passenger cars and light commercial vehicles.

The second document is ISO 17840–2:2019(E), ''Road vehicles—Information for first and second responders—Part 2: Rescue sheet for buses, coaches and heavy commercial vehicles.'' ISO 17840–2:2019(E) standardizes the rescue sheets for buses, coaches, and heavy commercial vehicles.

The third document is ISO 17840–3:2019(E), ''Road vehicles—Information for first and second responders—Part 3: Emergency response guide template.'' ISO 17840–3:2019(E) establishes a template and defines the general content for manufacturers' emergency response guides for all vehicle types.

All three documents would be incorporated by reference solely to specify the layout and format of the rescue sheets and emergency response guides. The ISO material is available for review at NHTSA and is available for purchase from ISO.[144]

Severability

The issue of severability of FMVSSs is addressed in 49 CFR 571.9. It provides that if any FMVSS or its application to any person or circumstance is held invalid, the remainder of the part and the application of that standard to other persons or circumstances is unaffected. Comments are requested on the severability of this proposed FMVSS.

Regulation Identifier Number

The Department of Transportation assigns a regulation identifier number (RIN) to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. You may use the RIN contained in

[144] ISO standards may be purchased from the ANSI webstore *https://webstore.ansi.org/.*

the heading at the beginning of this document to find this action in the Unified Agenda.

Rulemaking Summary, 5 U.S.C. 553(b)(4)

As required by 5 U.S.C. 553(b)(4), a summary of this rule can be found in the Abstract section of the Department's Unified Agenda entry for this rulemaking at *https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202304&RIN=2127-AM43.*

Plain Language

Executive Order 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public's needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that isn't clear?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

If you have any responses to these questions, please write to us with your views.

IX. Public Participation

How long do I have to submit comments?

Please see **DATES** section at the beginning of this document.

How do I prepare and submit comments?

- Your comments must be written in English.
- To ensure that your comments are correctly filed in the Docket, please include the Docket Number shown at the beginning of this document in your comments.
- Your comments must not be more than 15 pages long. (49 CFR 553.21). We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.
- If you are submitting comments electronically as a PDF (Adobe) File, NHTSA asks that the documents be submitted using the Optical Character Recognition (OCR) process, thus allowing NHTSA to search and copy certain portions of your submissions. Comments may be submitted to the docket electronically by logging onto the Docket Management System website at *http://www.regulations.gov.* Follow the online instructions for submitting comments.
- You may also submit two copies of your comments, including the attachments, to Docket Management at the address given above under **ADDRESSES**.

Please note that pursuant to the Data Quality Act, in order for substantive data to be relied upon and used by the agency, it must meet the information quality standards set forth in the OMB and DOT Data Quality Act guidelines. Accordingly, we encourage you to consult the guidelines in preparing your comments. OMB's guidelines may be accessed at *http://www.whitehouse.gov/omb/fedreg/reproducible.html.* DOT's guidelines may be accessed at *http://www.bts.gov/programs/statistical_policy_and_research/data_quality_guidelines.*

How can I be sure that my comments were received?

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail.

How do I submit confidential business information?

You should submit a redacted ''public version'' of your comment (including redacted versions of any additional documents or attachments) to the docket using any of the methods identified under **ADDRESSES**. This ''public version'' of your comment should contain only the portions for which no claim of confidential treatment is made and from which those portions for which confidential treatment is claimed has been redacted. See below for further instructions on how to do this.

You also need to submit a request for confidential treatment directly to the Office of Chief Counsel. Requests for confidential treatment are governed by 49 CFR part 512. Your request must set forth the information specified in Part 512. This includes the materials for which confidentiality is being requested (as explained in more detail below); supporting information, pursuant to Part 512.8; and a certificate, pursuant to Part 512.4(b) and Part 512, Appendix A.

You are required to submit to the Office of Chief Counsel one unredacted ''confidential version'' of the information for which you are seeking confidential treatment. Pursuant to Part 512.6, the words ''ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION'' or ''CONFIDENTIAL BUSINESS INFORMATION CONTAINED WITHIN BRACKETS'' (as applicable) must appear at the top of each page containing information claimed to be confidential. In the latter situation, where not all information on the page is claimed to be confidential, identify each item of information for which confidentiality is requested within brackets: ''[ ].''

You are also required to submit to the Office of Chief Counsel one redacted ''public version'' of the information for which you are seeking confidential treatment. Pursuant to Part 512.5(a)(2), the redacted ''public version'' should include redactions of any information for which you are seeking confidential treatment (*i.e.,* the only information that should be unredacted is information for which you are not seeking confidential treatment).

NHTSA is currently treating electronic submission as an acceptable method for submitting confidential business information to the agency under Part 512. Please do not send a hardcopy of a request for confidential treatment to NHTSA's headquarters. The request should be sent to Dan Rabinovitz in NHTSA's Office of the Chief Counsel (NCC) at *Daniel.Rabinovitz@dot.gov.* You may either submit your request via email or request a secure file transfer link. If you are submitting the request via email, please also email a courtesy copy of the request to K.Helena Sung in NCC at *Helena.Sung@dot.gov.*

Will the agency consider late comments?

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES**. To the extent possible, we will also consider comments that Docket Management receives after that date. If Docket Management receives a comment too late for us to consider in developing the final rule, we will consider that comment as an informal suggestion for future rulemaking action.

How can I read the comments submitted by other people?

You may read the comments received by Docket Management at the address given above under **ADDRESSES**. The hours of the Docket are indicated above in the same location. You may also see the comments on the internet. To read the comments on the internet, go to

http://www.regulations.gov. Follow the online instructions for accessing the dockets.

Please note that, even after the comment closing date, we will continue to file relevant information in the Docket as it becomes available. Further, some people may submit late comments. Accordingly, we recommend that you periodically check the Docket for new material.

X. Appendices to the Preamble

Appendix A. Table Comparing GTR No. 20, FMVSS No. 305, and FMVSS No. 305a

Table A below provides an overview of the requirements presently in the GTR No. 20, FMVSS No. 305, and the proposed FMVSS No. 305a for light vehicles (LVs) and heavy vehicles (HVs).

TABLE A—OVERVIEW OF SAFETY REQUIREMENTS IN GTR NO. 20, FMVSS NO. 305, AND THOSE PROPOSED IN THIS NPRM

Requirement category	Requirement	GTR No. 20	FMVSS No. 305	FMVSS No. 305a
Electrical Safety under Normal Vehicle Operations.	Physical Barrier Protection Electrical Isolation Isolation Monitoring (FCEVs) Charging Safety Driver Error Mitigation.	Yes for LV and HV	Yes for LV	Yes for LV and HV.
Post-Crash Safety	REESS Retention Electrolyte Leakage Electrical Safety.	Yes for LV	Yes for LV	Yes for LV and heavy school bus.
	Fire Safety	.....	No.	
Post-Crash Electrical Safety Compliance Options.	Low Voltage Electrical Isolation Physical Barrier Protection.	Yes for LV	Yes for LV	Yes for LV and heavy school bus.
	Low Energy (Capacitors)	Yes for LV	No	Yes for LV and heavy school bus.
Optional Post-crash Component Level REESS Tests.	Mechanical Crush Test instead of crash test.	Yes for LV	No	No.
	Mechanical Shock Test instead of crash test.	Only shock test for HV.		
REESS Safety Performance during Normal Vehicle Operations.	Overcharge Over-Discharge Over-Current Over-Temperature External Short-Circuit Low-Temperature Thermal Propagation Water Exposure REESS Venting.	Yes for LV and HV	No	Yes for LV and HV.
	Vibration Thermal Shock & Cycling Fire Resistance.	Yes for HV and LV	No	No.
Warning Requirements	Thermal Event Warning	Yes for LV and HV	No	Yes for LV and HV.
	Warning of Malfunction of Vehicle Controls for REESS Operations.			
	Low SOC	.....	.....	No.
Emergency Response Information	Rescue Sheets	No	No.	
	Emergency Response Guides (ERGs)	.....	.....	Yes for LV and HV.

Appendix B. Request for Comment on Phase 2 GTR No. 20 Approaches Under Consideration by the IWG

1. Electrolyte Release and Venting From the REESS

NHTSA requests comment on the IWG's continuing work on venting. Phase 2 of GTR No. 20 is considering more robust methods to verify the occurrence and quantification of electrolyte release [145] and/or venting.[146] Two possible approaches for detection of electrolyte release are under consideration: (1) detection of solid and liquid Li-ion, and (2) gas detection for the vapors released from the liquid electrolyte and vented gases.

Chemosensors [147] are currently being studied to detect the presence of Li-ion resulting from electrolyte release. However, no commercially available chemosensors have been identified that could be used for testing purposes to reliably detect electrolyte leakage.

Common gas detection methods include gas chromatography, fourier-transform infrared spectroscopy (FTIR), and different types of gas sensors. Emitted gases under consideration include carbon dioxide (CO_2), carbon monoxide (CO), hydrogen (H_2), oxygen (O_2), light C_1-C_5 hydrocarbons, *e.g.,* methane and ethane, and fluorine-containing compounds such as hydrogen fluoride (HF) and fluoro-organics such as *e.g.,* ethyl-fluoride. However, practical, and cost-effective methods of sampling the leakage/emissions/venting and determining acceptable exposure levels for different gases are still under development.

NHTSA seeks comment on:

- How these detection methods (chemosensors and gas detection methods) may best be utilized in a vehicle level test procedure for both normal operating conditions and post-crash scenarios.
- How to best manage gases and particulates emitted from the REESS for both normal operating conditions and post-crash scenarios.
- Which gases generated in and vented from Li-ion batteries should be focused on for all types of REESS chemistries and are anticipated to remain relevant as REESS

[145] EVS21–E2TG–0200 [EC]. Detection of electrolyte leakage by gas detection techniques. *https://wiki.unece.org/display/trans/EVS+21st+session.*

[146] Gas emissions in thermal runaway propagation experiments, *https://wiki.unece.org/download/attachments/177242909/EVS25-E2TG-0400%20%5BEC%5DGas%20emissions%20in%20thermal%20runaway%20propagation%20experiments.pdf?api=v2.*

[147] Chemosensors indicate the presence of Li-ion through a color and fluorescence change. Chemosensor means a molecule which is able to simultaneously bind and signal the presence of other species. F. Pina et al, J. Photochem. Photobiol. A, 126 (1999), 65–69.

chemistry and technology changes in the future.

- Practicable methods to verify the occurrence of electrolyte release and venting and to quantify the vented gases and vapors.

2. Single-Cell Thermal Runaway

The IWG is considering a test-based approach during Phase 2 of GTR No. 20. GTR No. 20 would require that the thermal propagation test procedure fulfill the following conditions:

- Triggering of thermal runaway at a single-cell level must be repeatable, reproducible, and practicable,
- Judgment of thermal runaway through common sensors, *e.g.,* voltage and temperature, needs to be practical, repeatable, and reproducible, and
- Judgement of whether consequent thermal events involve severe thermal propagation hazards, needs to be unequivocal and evidence based.

The two main initiation methods under consideration in Phase 2 are a localized rapid external heating method and a nail penetration method. The localized rapid external heating method is comprised of a film heater which is attached to an initiation cell's surface. The heater is turned on and set to reach its maximum power, and only turned off after thermal runaway occurs. In the nail penetration method, a steel nail 3 mm in diameter or more, with a circular cone is inserted into the initiation cell at a speed of 0.1 ~ 10 mm/s, which internally short-circuits the cell, inducing thermal runaway.

Current GTR No. 20 specifies three conditions in which thermal runaway can be detected:

1. The measured voltage of the initiation cell drops,
2. The measured temperature exceeds the maximum operating temperature defined by the manufacturer, and
3. The instantaneous rate of temperature change (dT/dt) ≥1 °C/s of the measured temperature.

Per GTR No. 20, thermal runaway can be judged when both (1) and (3) are detected, or both (2) and (3) are detected.

For the test procedure development, the only operational mode originally considered was the active driving possible mode. As discussions continue in Phase 2, other operational modes such as parking and externally charging are also under consideration. However, the test methods and performance criteria are still under development.

NHTSA conducted thermal runaway propagation tests on four different electric vehicle models using both the localized rapid external heating method [148] and the nail penetration (NP) method.[149] The criteria for identifying whether thermal runaway was initiated as described in ISO–6469–1:2019/DAM 1:2021(E) were used. Six tests were conducted at the vehicle level (with REESS installed in the vehicle) on four vehicle makes and models as shown in Table B–1.

TABLE B–1—THERMAL RUNAWAY PROPAGATION TESTS USING TWO DIFFERENT METHODS OF INITIATING THERMAL RUNAWAY ON A SINGLE CELL

Vehicle make, model, and model year	Thermal runaway initiation method	
	Localized external rapid heater method	Nail penetration method
2019 Chevrolet Bolt	X	
2020 Nissan Leaf	X	
2020 Tesla Model 3	X, X (Two tests)	
2021 Chevrolet Bolt	X	X
2021 Nissan Leaf		X
2022 Kia Niro	X	X

Note—X represents a test was conducted.

Thermal runaway was initiated using the localized heating method in tests with both the 2019 and 2021 Chevrolet Bolt vehicles, the 2020 Nissan Leaf, 2020 Tesla Model 3, and the 2022 Kia Niro. Two tests using the localized heating method were conducted on the 2020 Tesla Model 3 because the first test did not result in a thermal runaway. Tests were conducted on the 2021 Chevrolet Bolt, 2021 Nissan Leaf, and the 2022 Kia Nero using the nail penetration method for initiating thermal runaway.

Significant information was needed from the manufacturers on opening up the battery pack and on selecting the cell for initiating thermal runaway using both methods. The selection of the cell for initiating thermal runaway was not random and was based on which cells were accessible; the cells were not necessarily those that are more likely to cause thermal propagation if a thermal runaway was initiated. Copious amounts of smoke were released within and outside of the passenger cabin before flames were observed. Some of the gas emissions include hydrogen (flammable) and carbon monoxide (toxic). All vehicles tested have REESSs with pouch cells except for the Tesla Model 3, whose REESS has cylindrical cells. In the first Tesla Model 3, the initial heater was unsuccessful in transferring heat into the target cell due to lack of back pressure on the heater. In the second test, the target cell went into thermal runaway but experienced a side wall rupture towards the outside of the battery pack.[150] The timing of the smoke emissions and the thermal propagation was not the same for the two methods of initiating thermal runaway in a single cell of the REESS. The results of the tests and the timing of various events are shown in Table B–2 below.

TABLE B–2—SINGLE-CELL THERMAL RUNAWAY AND PROPAGATION TEST RESULTS—TIMING OF EVENTS

Method	Vehicle	External smoke (min:sec)	Smoke in cabin (min:sec)	External flame (min:sec)	Warning observed (min:sec)	Venting observed (min:sec)	CO in ppm (min:sec)
TRIM	2019 Chevrolet Bolt	00:15	00:38	22:29	No	Yes	N/A.
TRIM	2021 Chevrolet Bolt	00:17	01:10	08:17	Yes (00:51)	Yes	>100 ppm (02:20), >1500 ppm (03:30).
NP	2021 Chevrolet Bolt	00:07	03:10	11:58	Yes (00:27)	Yes	>100 ppm (07:30), >1200 ppm (08:58).
TRIM	2020 Nissan Leaf	00:25	04:45	31:09	Yes (00:45)	Yes	N/A.
NP	2021 Nissan Leaf	00:05	01:10	24:48	Yes (00:34)	Yes	>100 ppm (10:10), >800 ppm (21:30).
TRIM	2020 Tesla Model 3	N/A	N/A	N/A	No	No	N/A.
TRIM	2021 Tesla Model 3	00:28	N/A	N/A	No	Yes	N/A.

[148] Thermal Runaway Initiation Method (TRIM) heater developed by the National Research Council (NRC) Canada.

[149] The testers used a generic nail similar to that specified in the ISO–6469–1:2019/DAM 1 1:2021(E).

[150] Side wall rupture does not represent thermal runaway events observed in the field.

TABLE B–2—SINGLE-CELL THERMAL RUNAWAY AND PROPAGATION TEST RESULTS—TIMING OF EVENTS—Continued

Method	Vehicle	External smoke (min:sec)	Smoke in cabin (min:sec)	External flame (min:sec)	Warning observed (min:sec)	Venting observed (min:sec)	CO in ppm (min:sec)
TRIM	2022 Kia Niro	01:01	03:57	177:03	No	Yes	25 ppm (05:25).
NP	2022 Kia Niro	07:16	14:40	59:31	No	Yes	>100 ppm (14:20).

For the localized rapid external heating method, the heating element parameter may vary depending on the different battery chemistries or cell type (*e.g.,* large prismatic cells versus cylindrical cells).[151] More stable chemistries will require higher heat inputs than less stable chemistries. Calorimetric testing may need to be implemented to provide insights on what heating input parameters would be representative to avoid penalizing more stable cell chemistries, since they may require higher heat inputs to induce thermal runaway. The nail penetration method may be implemented in lieu of the localized rapid external heating method for more stable chemistries. It remains unclear whether the two initiation methods under consideration are equivalent in stringency. NHTSA's research results indicate that the timing of thermal propagation is different for the different thermal runaway initiation methods for the same vehicle models. The rapid heating and nail penetration thermal runaway initiation methods can be applied to only some cells in the REESS or REESS subsystem; only the cells that can be accessed and modified without impinging on adjacent cells in the pack can be triggered in these tests.[152] Additionally, the criteria for assessing whether thermal runaway has occurred in a cell needs further development.

Part of the performance criteria for a thermal runaway propagation test under consideration is for some form of warning to vehicle occupants and/or bystanders outside the vehicle in the event of thermal propagation within and outside the REESS. However, NHTSA considers warning to be a secondary mitigation strategy which would not prevent the thermal propagation from occurring in the first place. Thermal propagation resulting in EV fires are difficult to extinguish and may cause significant damage to adjacent structures and may pose a safety risk to people nearby, even when a warning is provided. In comparison, in the agency's view, the proposed documentation requirements provide a holistic risk mitigation of thermal propagation events resulting from single-cell thermal runaway due to an internal short-circuit within the cell. This risk mitigation would include of a cell in an REESS significantly before thermal runaway occurs to allow for appropriate action to be taken. Vehicle manufacturers are currently incorporating such technologies into the BMS to predict and evaluate the status of individual cells and mitigate the occurrence of single cell thermal runaway (SCTR) in the first place.

NHTSA seeks comment on the proposed reporting requirements to mitigate the risk of SCTR due to an internal short-circuit in a single cell of the REESS and the performance test under consideration in GTR No. 20 Phase 2.

3. REESS Vibration Requirements

Currently, during Phase 2 development of GTR No. 20, there are discussions for updating the vibration test to include vibration in all three orthogonal axes and at higher amplitudes and frequency range. NHTSA seeks comment on the safety need that would warrant an update to a more stringent vibration test than that already in UN 38.3 Test T3.[153] NHTSA seeks comment from vehicle manufacturers on practices they have implemented to avoid reliability issues and assure customer satisfaction in the field.

List of Subjects in 49 CFR Part 571

Imports, Incorporation by Reference, Motor vehicles, Motor vehicle safety.

Proposed Regulatory Text

In consideration of the foregoing, NHTSA proposes to amend 49 CFR part 571 as set forth below.

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

■ 1. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.95.

■ 2. Section 571.5 is amended by adding paragraphs (i)(5), (i)(6), and (i)(7), to read as follows:

§ 571.5 Matter incorporated by reference.

* * * * *

(i) * * *

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(5) ISO 17840–1:2022 (E), ''Road vehicles—Information for first and second responders—Part 1: Rescue sheet for passenger cars and light commercial vehicles,'' Second Edition, February 2022, into § 571.305a.

(6) ISO 17840–2:2019 (E), ''Road vehicles—Information for first and second responders—Part 2: Rescue sheet for buses, coaches and heavy commercial vehicles,'' First edition, April 2019, into § 571.305a.

(7) ISO 17840–3:2019 (E), '' Road vehicles—Information for first and second responders—Part 3: Emergency response guide template,'' First Edition, April 2019, into § 571.305a.

* * * * *

■ 3. Section 571.305a is added to read as follows:

§ 571.305a Standard No. 305a; Electric-Powered Vehicles: Electric Powertrain Integrity; Mandatory applicability begins on (*this date will be the compliance date of the final rule*).

S1. *Scope.* This standard specifies requirements for protection from harmful electric shock, fire, explosion, and gas venting during normal vehicle operation and during and after a crash.

S2. *Purpose.* The purpose of this standard is to reduce deaths and injuries during normal vehicle operations and during and after a crash that occur because of electrolyte leakage, intrusion of electric energy storage/conversion devices into the occupant compartment, electric shock, fire, explosion, and gas venting, including deaths and injuries due to driver error.

S3. *Application.* This standard applies to passenger cars, multipurpose passenger vehicles, trucks, and buses that use electrical propulsion components with working voltages greater than 60 volts direct current (VDC) or 30 volts alternating current (VAC), and whose speed attainable over a distance of 1.6 km on a paved level surface is more than 40 km/h.

S4. *Definitions.*

Active driving possible mode means the vehicle mode when application of pressure to the accelerator pedal (or activation of an equivalent control) or release of the brake system causes the electric power train to move the vehicle.

Automatic disconnect means a device that when triggered, conductively separates a high voltage source from the electric power train or the rest of the electric power train.

Breakout harness means connector wires that are connected for testing purposes to the REESS on the traction side of the automatic disconnect.

[151] ISO 6469–1:2019/DAM1:2021(E), ''Electrically propelled road vehicles—Safety specifications—Part 1: Rechargeable energy storage system (RESS)—Draft Amendment 1.''

[152] NHTSA's testing experience indicates that these testable cells are generally located along the edges of a module. The result of single-cell thermal runaway will vary with location based on heat transfer to adjacent cells and other components.

[153] The vibration load spectrum in GTR No. 20 was derived from UN 38.3.4.3 ''Recommendation on the Transport of Dangerous Goods, Manual of Tests and Criteria.'' *https://unece.org/fileadmin/DAM/trans/danger/publi/manual/Rev7/Manual_Rev7_E.pdf.*

Capacitor means a device used to store electrical energy, consisting of one or more pairs of conductors separated by an insulator: x-capacitors are connected between electrical mains or neutral and y-capacitors are connected between a main to ground.

Charge connector is a conductive device that, by insertion into a vehicle charge inlet, establishes an electrical connection of the vehicle to an external electric power supply for the purpose of transferring energy.

Chassis dynamometer means a mechanical device that uses one or more fixed roller assemblies to simulate different road conditions within a controlled environment and is used for a wide variety of vehicle testing.

Connector means a device providing mechanical connection and disconnection of high voltage electrical conductors to a suitable mating component, including its housing.

n C Rate means the constant current of the REESS, which takes 1/n hours to charge or discharge the REESS between 0 and 100 percent state of charge.

Direct contact is the contact of any person or persons with high voltage live parts.

Electric energy storage device means a high voltage source that stores energy for vehicle propulsion. This includes, but is not limited to, a high voltage battery or battery pack, rechargeable energy storage device, and capacitor module.

Electric energy storage/conversion device means a high voltage source that stores or converts energy for vehicle propulsion. This includes, but is not limited to, a high voltage battery or battery pack, fuel cell stack, rechargeable energy storage device, and capacitor module.

Electric energy storage/conversion system means an assembly of electrical components that stores or converts electrical energy for vehicle propulsion. This includes, but is not limited to, high voltage batteries or battery packs, fuel cell stacks, rechargeable energy storage systems, capacitor modules, inverters, interconnects, and venting systems.

Electric power train means an assembly of electrically connected components which includes, but is not limited to, electric energy storage/conversion systems and propulsion systems.

Electrical chassis means conductive parts of the vehicle whose electrical potential is taken as reference and which are:

(1) conductively linked together, and

(2) not high voltage sources during normal vehicle operation.

Electrical isolation of a high voltage source in the vehicle means the electrical resistance between the high voltage source and any of the vehicle's electrical chassis divided by the working voltage of the high voltage source.

Electrical protection barrier is the part providing protection against direct contact with high voltage live parts from any direction of access.

Electrolyte leakage means the escape of liquid electrolyte from the REESS.

Emergency response guide means a document containing in-depth vehicle-specific information related to fire, submersion, leakage of fluids, towing, and storage of vehicles for first and second responders.

Exposed conductive part is the conductive part that can be touched under the provisions of the IPXXB protection degree and that is not normally energized, but that can become electrically energized under isolation fault conditions. This includes parts under a cover if the cover can be removed without using tools.

External Charging mode means the vehicle mode when the REESS is charging with external electric power supply connected through the charge connector to the vehicle charge inlet.

External electric power supply is a power supply external to the vehicle that provides electric power to charge the electric energy storage device in the vehicle through the charge connector.

First responder means a person with specialized training such as a law enforcement officer, paramedic, emergency medical technician, and/or firefighter.

Fuel cell system is a system containing the fuel cell stack(s), air processing system, fuel flow control system, exhaust system, thermal management system, and water management system.

High voltage live part means a live part of a high voltage source.

High voltage source means any electric component which is contained in the electric power train or conductively connected to the electric power train and has a working voltage greater than 30 VAC or 60 VDC.

Indirect contact is the contact of any person or persons with exposed conductive parts.

Live part is a conductive part of the vehicle that is electrically energized under normal vehicle operation.

Luggage compartment is the space in the vehicle for luggage accommodation, separated from the passenger compartment by the front or rear bulkhead and bounded by a roof, hood or trunk lid, floor, and side walls, as well as by electrical protection barriers provided for protecting the occupants from direct contact with high voltage live parts.

Normal vehicle operation includes operating modes and conditions that can reasonably be encountered during typical operation of the vehicle, such as driving, parking, and standing in traffic, as well as charging using chargers that are compatible with the specific charging ports installed on the vehicle. It does not include conditions where the vehicle is damaged, either by a crash or road debris, subjected to fire or water submersion, or in a state where service and/or maintenance is needed or being performed.

Parking mode is the vehicle mode in which the vehicle power is turned off, the vehicle propulsion system and ancillary equipment such as the radio are not operational, and the vehicle is stationary.

Passenger compartment is the space for occupant accommodation that is bounded by the roof, floor, side walls, doors, outside glazing, front bulkhead and rear bulkhead or rear gate, as well as electrical protection barriers provided for protecting the occupants from direct contact with high voltage live parts.

Propulsion system means an assembly of electric or electro-mechanical components or circuits that propel the vehicle using the energy that is supplied by a high voltage source. This includes, but is not limited to, electric motors, inverters/converters, and electronic controllers.

Protection degree IPXXB is protection from contact with high voltage live parts. It is tested by probing electrical protection barriers with the jointed test finger probe, IPXXB, in Figure 7b.

Protection degree IPXXD is protection from contact with high voltage live parts. It is tested by probing electrical protection barriers with the test wire probe, IPXXD, in Figure 7a.

Rechargeable Electrical Energy Storage System (REESS) means the rechargeable electric energy storage system that provides electric energy for electrical propulsion.

Rescue sheet means an abbreviated version of an emergency response guide that gives quick information about a vehicle's construction, intended for use by first and second responders at the scene of a crash.

Rupture means an opening through the casing of the REESS that would permit the IPXXB test probe to penetrate and contact live parts.

Second responder means a worker who supports first responders by cleaning up a site, towing vehicles, and/

or supporting services after an event requiring first responders.

Service disconnect is the device for deactivation of an electrical circuit when conducting checks and services of the vehicle electrical propulsion system.

State of charge (SOC) means the available electrical charge in a tested device expressed as a percentage of its rated capacity.

Thermal event means the condition when the temperature within the REESS is significantly higher than the maximum operating temperature.

Thermal runaway means an uncontrolled increase of cell temperature caused by exothermic reactions inside the cell.

Thermal propagation means the sequential occurrence of thermal runaway within a REESS triggered by thermal runaway of a cell in the REESS.

VAC means volts of alternating current (AC) expressed using the root mean square value.

VDC means volts of direct current (DC).

Vehicle charge inlet is the device on the electric vehicle into which the charge connector is inserted for the purpose of transferring energy and exchanging information from an external electric power supply.

Venting means the release of excessive internal pressure from cell or battery in a manner intended by design to preclude rupture or explosion.

Working voltage means the highest root mean square voltage of the voltage source, which may occur across its terminals or between its terminals and any conductive parts in open circuit conditions or under normal operating conditions.

S5. *General Requirements.*

S5.1 *Vehicles of GVWR of 4,536 kilograms (kg) or less (light vehicles).* Each vehicle with a GVWR of 4,536 kg or less shall meet the requirements set forth in S6 (normal vehicle operation safety), S8 (post-crash safety), S11 (vehicle controls managing REESS safe operations), S13.2 (thermal event in REESS warning), S14 (water exposure safety), and S15 (emergency response information).

S5.2 *Vehicles with a GVWR greater than 4,536 kg other than school buses (heavy vehicles other than school buses).* Each heavy vehicle with a GVWR greater than 4,536 kg, other than school buses, shall meet the requirements set forth in S6 (normal vehicle operation safety), S11 (vehicle controls managing REESS safe operations), S13.2 (thermal event in REESS warning), S14 (water exposure safety), and S15 (emergency response information).

S5.3 *School buses with a GVWR greater than 4,536 kg.* Each school bus with a GVWR greater than 4,536 kg shall meet the requirements set forth in S6 (normal vehicle operation safety), S8 (post-crash safety), S11 (vehicle controls managing REESS safe operations), S13.2 (thermal event in REESS warning), S14 (water exposure safety), and S15 (emergency response information).

S6. *Normal vehicle operation safety.* Each vehicle to which this standard applies must meet the requirements in S6.1 to S6.6, when tested according to the relevant provisions in S7.

S6.1 *Protection against direct contact.*

S6.1.1 *Marking.* The symbol shown in Figure 6 shall be present on or near electric energy storage devices. The symbol in Figure 6 shall also be visible on electrical protection barriers which, when removed, expose live parts of high voltage sources. The symbol shall be yellow and the bordering and the arrow shall be black.

S6.1.1.1 The marking is not required for electrical protection barriers that cannot be physically accessed, opened, or removed without the use of tools. Markings are not required for electrical connectors or the vehicle charge inlet.

S6.1.2 *High voltage cables.* Cables for high voltage sources which are not located within electrical protection barriers shall be identified by having an outer covering with the color orange.

S6.1.3 *Service disconnect.* For a service disconnect which can be opened, disassembled, or removed without tools, protection degree IPXXB shall be provided when tested under procedures specified in S7.3.1 using the IPXXB test probe shown in Figures 7a and 7b.

S6.1.4 *Protection degree of high voltage live parts.*

(a) Protection degree IPXXD shall be provided for high voltage live parts inside the passenger or luggage compartment when tested according to the procedures specified in S7.3.1 using the IPXXD test probe shown in Figure 7a.

(b) Protection degree IPXXB shall be provided for high voltage live parts in areas other than the passenger or luggage compartment when tested according to the procedures specified in S7.3.1 using the IPXXB test probe shown in Figures 7a and 7b.

S6.1.5 *Connectors.* All connectors shall provide direct contact protection by:

(a) Meeting the requirements specified in S6.1.4 when the connector is connected to its corresponding mating component; and,

(b) If a connector can be separated from its mating component without the use of a tool, meeting at least one of the following conditions from (b)(1), (2), or (3) of this section:

(1) The connector meets the requirements of S6.1.4 when separated from its mating component;

(2) The voltage of the live parts becomes less than or equal to 60 VDC or 30 VAC within one second after the connector is separated from its mating component; or,

(3) The connector requires at least two distinct actions to separate from its mating component and there are other components that must be removed in order to separate the connector from its mating component and these other components cannot be removed without the use of tools.

S6.1.6 *Vehicle charge inlet.* Direct contact protection for a vehicle charge inlet shall be provided by meeting the requirements specified in S6.1.4 when the charge connector is connected to the vehicle inlet and by meeting at least one of the requirements of subparagraphs (a) or (b).

(a) The vehicle charge inlet meets the requirements of S6.1.4 when the charge connector is not connected to it; or

(b) The voltage of the high voltage live parts becomes equal to or less than 60 VDC or equal to or less than 30 VAC within 1 second after the charge connector is separated from the vehicle charge inlet.

S6.2 *Protection against indirect contact.*

S6.2.1 The resistance between all exposed conductive parts of electrical protection barriers and the electrical chassis shall be less than 0.1 ohms when tested according to the procedures specified in S7.3.2

S6.2.2 The resistance between any two simultaneously reachable exposed conductive parts of the electrical protection barriers that are less than 2.5 meters from each other shall be less than 0.2 ohms when tested according to the procedures specified in S7.3.2.

S6.3 *Electrical isolation.*

S6.3.1 *Electrical isolation of AC and DC high voltage sources.* The electrical isolation of a high voltage source, determined in accordance with the procedure specified in S7.2 must be greater than or equal to one of the following:

(a) 500 ohms/volt for an AC high voltage source;

(b) 100 ohms/volt for an AC high voltage source if it is conductively connected to a DC high voltage source, but only if the AC high voltage source meets the requirements for protection against direct contact in S6.1.4 and the

protection from indirect contact in S6.2; or

(c) 100 ohms/volt for a DC high voltage source.

S6.3.2 *Exclusion of high voltage sources from electrical isolation requirements.* A high voltage source that is conductively connected to an electric component which is conductively connected to the electrical chassis and has a working voltage less than or equal to 60 VDC, is not required to meet the electrical isolation requirements in S6.3.1 if the voltage between the high voltage source and the electrical chassis is less than or equal to 30 VAC or 60 VDC.

S6.3.3 *Electrical isolation of high voltage sources for charging the electric energy storage device.* For the vehicle charge inlet intended to be conductively connected to the AC external electric power supply, the electric isolation between the electrical chassis and the high voltage sources that are conductively connected to the vehicle charge inlet during charging of the electric energy storage device shall be greater than or equal to 500 ohms/volt when the charge connector is disconnected. The electrical isolation is measured at the high voltage live parts of the vehicle charge inlet and determined in accordance with the procedure specified in S7.2. During the measurement, the electric energy storage device may be disconnected.

S6.4 *Electrical isolation monitoring.* DC high voltage sources of vehicles with a fuel cell system shall be monitored by an electrical isolation monitoring system that displays a warning for loss of isolation when tested according to S7.4. The system must monitor its own readiness and the visual warning display must be provided to the driver. For a vehicle with autonomous driving systems and without manually-operated driving controls, the visual warning must be provided to all the front row occupants.

S6.5 *Electric shock protection during charging.* For motor vehicles with an electric energy storage device that can be charged through a conductive connection with a grounded external electric power supply, a device to enable conductive connection of the electrical chassis to the earth ground shall be provided. This device shall enable connection to the earth ground before exterior voltage is applied to the vehicle and retain the connection until after the exterior voltage is removed from the vehicle.

S6.6 *Mitigating driver error.*

S6.6.1 *Indicator of active driving possible mode.* At least a momentary indication shall be given to the driver each time the vehicle is first placed in active driving possible mode after manual activation of the propulsion system. This requirement does not apply under conditions where an internal combustion engine directly or indirectly provides the vehicle's propulsion power when the vehicle is first placed in the active driving possible mode after manual activation of the propulsion system.

S6.6.2 *Indicator of active driving possible mode when leaving the vehicle.* When leaving the vehicle, the driver shall be informed by an auditory or visual signal if the vehicle is still in the active driving possible mode.

S6.6.3 *Prevent drive-away.* If the on-board electric energy storage device can be externally charged, vehicle movement of more than 150 mm by its own propulsion system shall not be possible as long as the charge connector of the external electric power supply is physically connected to the vehicle charge inlet in a manner that would permit charging of the electric energy storage device.

S7. *Electrical safety test procedures for normal vehicle operation safety.* The following provisions specify the test procedures associated with the requirements of S6.

S7.1 *Voltage measurements.* For the purpose of determining the voltage level of the high voltage source, voltage is measured as shown in Figure 1 using a voltmeter that has an internal resistance of at least 10 MΩ. All post-crash voltage measurements for determining electrical isolation of high voltage sources specified in S8.2(a), the voltage levels specified in S8.2(b), and the energy in capacitors specified in S8.2(d) are made between 10 to 60 seconds after impact.

S7.1.1 For a high voltage source that has an automatic disconnect that is physically contained within itself, the voltage measurement after the test is made from the side of the automatic disconnect connected to the electric power train or to the rest of the electric power train if the high voltage source is a component contained in the power train. For a high voltage source that has an automatic disconnect that is not physically contained within itself, the voltage measurement after the test is made from both the high voltage source side of the automatic disconnect and from the side of the automatic disconnect connected to the electric power train or to the rest of the electric power train if the high voltage source is a component contained in the power train.

S7.1.2 Voltage Vb is measured across the two terminals of the voltage source. Before a vehicle crash test, Vb is equal to or greater than the working voltage as specified by the vehicle manufacturer.

S7.1.3 Voltage V1 is measured between the negative side of the high voltage source and the electrical chassis as shown in Figure 2. Voltage V2 is measured between the positive side of the high voltage source and the electrical chassis as shown in Figure 3.

S7.2 *Test method for determining electrical isolation.* Measure the voltages V1, V2, and Vb as shown in Figure 1 in accordance with S7.1

S7.2.1 If V1 is greater than or equal to V2, insert a known resistance (Ro) between the negative side of the high voltage source and the electrical chassis. With the Ro installed, measure the voltage (V1′) as shown in Figure 4 between the negative side of the high voltage source and the electrical chassis. Calculate the electrical isolation resistance (Ri) according to the formula shown. Divide Ri (in ohms) by the working voltage of the high voltage source (in volts) to obtain the electrical isolation (in ohms/volt).

S7.2.2 If V2 is greater than V1, insert a known resistance (Ro) between the positive side of the high voltage source and the electrical chassis. With the Ro installed, measure the voltage (V2′) as shown in Figure 5 between the positive side of the high voltage source and the electrical chassis. Calculate the electrical isolation resistance (Ri) according to the formula shown. Divide Ri (in ohms) by the working voltage of the high voltage source (in volts) to obtain the electrical isolation (in ohms/volt).

S7.3 *Test methods for evaluating physical barrier protection.*

S7.3.1 *Test method to evaluate protection from direct contact with high voltage sources.*

(a) Any parts surrounding the high voltage components are opened, disassembled, or removed without the use of tools.

(b) The selected access probe is inserted into any gaps or openings of the electrical protection barrier with a test force between 9 Newton to 11 Newton with the IPXXB probe or 1 Newton to 2 Newton with the IPXXD probe. If the probe partly or fully penetrates into the electrical protection barrier, it is placed in every possible position to evaluate contact with high voltage live parts. If partial or full penetration into the electrical protection barrier occurs with the IPXXB probe, the IPXXB probe shall be placed as follows: starting from the straight position, both joints of the test finger are rotated progressively through an angle of up to 90 degrees with respect to the axis of the adjoining

section of the test finger and are placed in every possible position.

(c) A low voltage supply (of not less than 40 V and not more than 50 V) in series with a suitable lamp may be connected between the access probe and any high voltage live parts inside the electrical protection barrier to indicate whether high voltage live parts were contacted.

(d) A mirror or fiberscope may be used to inspect whether the access probe touches high voltage live parts inside the electrical protection barrier.

(e) Protection degree IPXXD or IPXXB is verified when the following conditions are met:

(1) The access probe does not touch high voltage live parts. The IPXXB access probe may be manipulated as specified in S7.3.1(b) for evaluating contact with high voltage live parts. The methods specified in S7.3.1(c) or S7.3.1(d) may be used to aid the evaluation. If method S7.3.1(c) is used for verifying protection degree IPXXB or IPXXD, the lamp shall not light up.

(2) The stop face of the access probe does not fully penetrate into the electrical protection barrier.

S7.3.2 *Test method to evaluate protection against indirect contact with high voltage sources.* Any parts surrounding the high voltage components are opened, disassembled, or removed without the use of tools. At the option of the manufacturer, protection against indirect contact with high voltage sources shall be determined using the test method in subparagraph (a) or subparagraph (b).

(a) *Test method using a resistance tester.* The resistance tester is connected to the measuring points (the electrical chassis and any exposed conductive part of electrical protection barriers or any two simultaneously reachable exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other), and the resistance is measured using a resistance tester that can supply current levels of at least 0.2 Amperes with a resolution of 0.01 ohms or less. The resistance between two exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other may be calculated using the separately measured resistances of the relevant parts of the electric path.

(b) *Test method using a DC power supply, voltmeter, and ammeter.*

(1) Connect the DC power supply, voltmeter, and ammeter to the measuring points (the electrical chassis and any exposed conductive part or any two simultaneously reachable exposed conductive parts that are less than 2.5 meters from each other) as shown in Figure 8.

(2) Adjust the voltage of the DC power supply so that the current flow becomes more than 0.2 Amperes.

(3) Measure the current I and the voltage V shown in Figure 8.

(4) Calculate the resistance R according to the formula, R=V/I.

(5) The resistance between two simultaneously reachable exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other may be calculated using the separately measured resistances of the relevant parts of the electric path.

S7.3.3 *Test method to determine voltage between exposed conductive parts of electrical protection barriers and the electrical chassis and between exposed conductive parts of electrical protection barriers.*

(a) Any parts surrounding the high voltage components are opened, disassembled, or removed without the use of tools.

(b) Connect the voltmeter to the measuring points (exposed conductive part of an electrical protection barrier and the electrical chassis or any two simultaneously reachable exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other).

(c) Measure the voltage.

(d) The voltage between two simultaneously reachable exposed conductive parts of electrical protection barriers that are less than 2.5 meters from each other may be calculated using the separately measured voltages between the relevant electrical protection barriers and the electrical chassis.

S7.4 *Test method for evaluating on-board electrical isolation monitoring system.*

Prior to any impact test, the requirements of S6.4 for the on-board electrical isolation monitoring system shall be tested using the following procedure.

(a) The electric energy storage device is at the state-of-charge specified in S7.1.

(b) The switch or device that provides power from the electric energy storage/conversion system to the propulsion system is in the activated position or the ready-to-drive position.

(c) Determine the isolation resistance, Ri, of the high voltage source with the electrical isolation monitoring system using the procedure outlined in S7.2.

(d) Insert a resistor with resistance Ro equal to or greater than 1/(1/(95 times the working voltage of the high voltage source)—1/Ri) and less than 1/(1/(100 times the working voltage of the high voltage source)—1/Ri) between the positive terminal of the high voltage source and the electrical chassis.

(e) The electrical isolation monitoring system indicator shall provide a visual warning to the driver. For a vehicle with autonomous driving systems and without manually-operated driving controls, the visual warning must be provided to all the front row occupants.

S7.5 *Test method for determining post-crash energy in capacitors.*

(a) Prior to the crash tests, the vehicle manufacturer must identify the capacitors, type of capacitors (x-capacitors and y-capacitors) and their respective capacitance (Cx and Cy) in the electric power train for which the low energy compliance option for post-crash electrical safety in S8.2(d) is applied.

(b) Voltages Vb, V1, and V2 are measured across the capacitors in accordance with S7.1.

(c) The energy in a x-capacitor is equal to $0.5 \times Cx \times Vb^2$

(d) The energy in a y-capacitor is equal to $0.5 \times Cy \times (V1^2 + V2^2)$.

S8. *Post-crash safety.* Each vehicle with a GVWR of 4,536 kg or less to which this standard applies, must meet the requirements in S8.1, S8.2, S8.3, and S8.4 when tested according to S9 under the conditions of S10. Each school bus with a GVWR greater than 4,536 kg to which this standard applies, must meet the requirements in S8.1, S8.2, S8.3, and S8.4 when tested according to S9.5 under the conditions of S10.

S8.1 *Fire safety.* Starting from the time of impact and continuing until one hour after the completion of the sequence of tests specified in S9 of this standard, there shall be no evidence of fire or explosion in any part of the vehicle. The assessment of fire or explosion is verified by visual inspection without disassembly of the REESS or vehicle.

S8.2 *Electrical safety.* After each test specified in S9 of this standard, each high voltage source in a vehicle must meet one of the following electrical safety requirements: electrical isolation requirements of subparagraph (a), the voltage level requirements of subparagraph (b), or the physical barrier protection requirements of subparagraph (c). High voltage capacitors in the electric power train may also meet electrical safety requirements using the low-energy requirements of subparagraph (d).

(a) The electrical isolation of the high voltage source, determined in accordance with the procedure specified in S7.2, must be greater than or equal to one of the following:

(1) 500 ohms/volt for an AC high voltage source; or

(2) 100 ohms/volt for an AC high voltage source if it is conductively connected to a DC high voltage source, but only if the AC high voltage source meets the physical barrier protection requirements specified in S8.3(c)(1) and S8.3(c)(2); or

(3) 100 ohms/volt for a DC high voltage source.

(b) The voltages V1, V2, and Vb of the high voltage source, measured according to the procedure specified in S7.1, must be less than or equal to 30 VAC for AC components or 60 VDC for DC components.

(c) Protection against electric shock by direct and indirect contact (physical barrier protection) shall be demonstrated by meeting the following three conditions:

(1) The high voltage source (AC or DC) meets the protection degree IPXXB when tested according to the procedure specified in S7.3.1 using the IPXXB test probe shown in Figures 7a and 7b;

(2) The resistance between exposed conductive parts of the electrical protection barrier of the high voltage source and the electrical chassis is less than 0.1 ohms when tested according to the procedures specified in S7.3.2. In addition, the resistance between an exposed conductive part of the electrical protection barrier of the high voltage source and any other simultaneously reachable exposed conductive parts of electrical protection barriers within 2.5 meters of it must be less than 0.2 ohms when tested using the test procedures specified in S7.3.2; and

(3) The voltage between exposed conductive parts of the electrical protection barrier of the high voltage source and the electrical chassis is less than or equal to 30 VAC or 60 VDC as measured in accordance with S7.3.3. In addition, the voltage between an exposed conductive part of the electrical protection barrier of the high voltage source and any other simultaneously reachable exposed conductive parts of electrical protection barriers within 2.5 meters of it must be less than or equal to 30 VAC or 60 VDC as measured in accordance with S7.3.3.

(d) The total energy of unidirectional single impulse currents from capacitors shall be less than 0.2 Joules when determined in accordance with the procedure specified in S7.5.

S8.3 *Electric energy storage/conversion device retention.* During and after each test specified in S9 of this standard:

(a) Electric energy storage/conversion devices shall remain attached to the vehicle by at least one component anchorage, bracket, or any structure that transfers loads from the device to the vehicle structure, and

(b) Electric energy storage/conversion devices located outside the occupant compartment shall not enter the occupant compartment.

S8.4 *Electrolyte leakage from electric energy storage devices.* Not more than 5.0 liters of electrolyte shall leak from electric energy storage devices, and no visible trace of electrolyte shall leak into the passenger compartment. Leakage is measured from the time of the impact until 30 minutes thereafter, and throughout any static rollover after a barrier impact test, specified in S9 of this standard.

S9. *Crash test specifications.* A test vehicle with a GVWR less than or equal to 4,536 kg, under the conditions of S10, is subject to any one single barrier crash test of S9.1, S9.2, or S9.3, followed by the static rollover test of S9.4. A school bus with a GVWR greater than 4,536 kg, under the conditions of S10, is subject to the contoured barrier crash test of S9.5. A particular vehicle need not meet further test requirements after having been subjected to a single barrier crash/static rollover test sequence.

S9.1 *Frontal barrier crash.* The test vehicle, with test dummies in accordance with S6.1 of 571.301 of this chapter, traveling longitudinally forward at any speed up to and including 48 km/h, impacts a fixed collision barrier that is perpendicular to the line of travel of the vehicle, or at an angle up to 30 degrees in either direction from the perpendicular to the line of travel of the vehicle.

S9.2 *Rear moving barrier impact.* The test vehicle, with test dummies in accordance with S6.1 of 571.301 of this chapter, is impacted from the rear by a barrier that conforms to S7.3(b) of 571.301 of this chapter and that is moving at any speed between 79 and 81 km/h.

S9.3 *Side moving deformable barrier impact.* The test vehicle, with the appropriate 49 CFR part 572 test dummies specified in 571.214 at positions required for testing by S7.1.1, S7.2.1, or S7.2.2 of Standard 214, is impacted laterally on either side by a moving deformable barrier moving at any speed between 52.0 km/h and 54.0 km/h.

S9. *4 Post-impact test static rollover.* After each crash test specified in S9.1, S9.2, and S9.3, without any alteration of the vehicle, the vehicle is rotated on its longitudinal axis to each successive increment of 90 degrees under the test conditions of S10.3.

S9.5 *Moving contoured barrier crash.* The test vehicle, under the conditions of S10.1 and S10.2, is impacted at any point and at any angle by the moving contoured barrier assembly, specified in S7.5 and S7.6 in 571.301 of this chapter, traveling longitudinally forward at any speed up to and including 48 km/h.

S10. *Crash test conditions.*

S10.1 *State-of-charge.* The electric energy storage device(s) shall be at the state-of-charge specified in either subparagraph (a), (b), or (c):

(a) At the maximum state-of-charge in accordance with the vehicle manufacturer's recommended charging procedures, as stated in the vehicle owner's manual or on a label that is permanently affixed to the vehicle; or

(b) If the manufacturer has made no recommendation for charging procedures in the owner's manual or on a label permanently affixed to the vehicle, at a state-of-charge of not less than 95 percent of the maximum capacity of the electric energy storage device(s); or

(c) If the electric energy storage device(s) is/are rechargeable only by an energy source on the vehicle, at any state-of-charge within the normal operating voltage defined by the vehicle manufacturer.

S10.2 *Vehicle conditions.* The switch or device that provides power from the electric energy storage/conversion system to the propulsion system is in the activated position or the ready-to-drive position. Bypass any devices or systems that do not allow the propulsion system to be energized at the time of impact when the vehicle ignition is on and the vehicle is in neutral.

S10.2.1 The parking brake is disengaged and the vehicle drive system is in the neutral position. In a test conducted under S9.3, the parking brake is set.

S10.2.2 Tires are inflated to the manufacturer's specifications.

S10.2.3 The vehicle, including test devices and instrumentation, is loaded as follows:

(a) A passenger car is loaded to its unloaded vehicle weight plus its rated cargo and luggage capacity weight, secured in the luggage compartment, plus the necessary test dummies as specified in S9, restrained only by means that are installed in the vehicle for protection at its seating position.

(b) A multipurpose passenger vehicle, truck, or bus, with a GVWR of 4,536 kg (10,000 lb) or less, is loaded to its unloaded vehicle weight plus the necessary dummies, as specified in S9, plus 136 kg or its rated GVWR, whichever is less, secured in the load carrying area and distributed as nearly

as possible in proportion to its GVWR. For the purpose of this standard, unloaded vehicle weight does not include the weight of work-performing accessories. Each dummy is restrained only by means that are installed in the vehicle for protection at its seating position.

S10.3 *Static rollover test conditions.* The vehicle is rotated about its longitudinal axis, with the axis kept horizontal, to each successive increment of 90°, 180°, and 270° at a uniform rate, with 90° of rotation taking place in any time interval from 1 to 3 minutes. After reaching each 90° increment the vehicle is held in that position for 5 minutes.

S10.4 *Rear moving barrier impact test conditions.* The conditions of S7.3(b) and S7.6 of 571.301 of this chapter apply to the conducting of the rear moving deformable barrier impact test specified in S9.2.

S10.5 *Side moving deformable barrier impact test conditions.* The conditions of S8.9, S8.10, and S8.11 of 571.214 of this chapter apply to the conduct of the side moving deformable barrier impact test specified in S9.3.

S11. *Vehicle controls managing REESS safe operations.* Each vehicle to which the standard applies shall meet the requirements in S11.1, S11.2, and S11.3, when tested according to S12.

S11.1 When tested in accordance with the overcharge test in S12.1, the over-discharge test in S12.2, the overcurrent test in S12.3, the high-temperature test in S12.4, and the short-circuit test in accordance with S12.5, each vehicle shall meet the following:

(a) During the test, there shall be no evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS as verified by visual inspection without disassembly of the vehicle.

(b) The isolation resistance of the high voltage sources measured after the test shall not be less than 100 ohms/volt when determined in accordance with S7.2.

S11.2 The vehicle manufacturer must make available to the agency, upon request, documentation in accordance with S12.7 that demonstrates whether the vehicle is equipped with controls for REESS operations at or below the lower boundary REESS temperature threshold for safe REESS operations specified by the manufacturer.

S11.3 The vehicle manufacturer must make available to the agency, upon request, documentation in accordance with S12.8 that demonstrates the activation of a visual warning, when the vehicle is in active driving possible mode to indicate operational failure of the vehicle controls that manage the safe operation of the REESS. The warning system shall monitor its own readiness and the visual warning must be provided to the driver. For a vehicle with autonomous driving systems and without manually operated driving controls, the visual warning must be provided to all the front row occupants.

S12. *Test methods and documentation for evaluating vehicle controls managing REESS safe operations.*

S12.1 *Overcharge test.* The overcharge test is conducted at ambient temperatures between 10 °C and 30 °C, with the vehicle REESS initially set between 90 to 95 percent SOC. The following steps are conducted to evaluate the vehicle's overcharge protection controls:

(a) A breakout harness is connected to the traction side of the REESS. Manufacturer may specify an appropriate location(s) and attachment point(s) to connect the breakout harness.

(b) Temperature probes are connected to the REESS outer casing to monitor changes in REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

(c) The external charge/discharge equipment, with maximum voltage and current set at least 10 percent higher than the REESS voltage and current limits, is connected to the breakout harness.

(d) The vehicle switch or device that provides power to the vehicle controls that manage REESS operations is set to the activated position.

(e) The REESS is charged with the external charge/discharge equipment with the maximum charge current specified by the manufacturer. If the manufacturer does not specify an appropriate charge current, then a charge rate of ⅓C is used.

(f) Charging is continued until the following occurs:

(1) The overcharge protection control terminates the charge current;

(2) The REESS temperature is 10 °C above the manufacturer specified maximum operating temperature of the REESS; or

(3) 12 hours have passed since the start of charging the vehicle.

(g) After the charge current is terminated, if charge and discharge is permitted by the vehicle controls, a standard cycle is performed in accordance with S12.6.

(h) After the completion of the standard cycle, or if the standard cycle was not performed, after charging is terminated, the vehicle is observed for 1 hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS.

(i) At the conclusion of the test, electrical isolation of the REESS is determined in accordance with S7.2.

S12.2 *Over-discharge test.* The over-discharge test is conducted at ambient temperatures between 10 °C and 30 °C, with the vehicle REESS initially set between 10 and 15 percent SOC. For a vehicle with on-board energy conversion systems such as an internal combustion engine or a fuel cell, the fuel supply is set to the minimum level where active driving possible mode is permitted. The following steps are conducted to evaluate the vehicle's over-discharge protection controls:

(a) A breakout harness is connected to the traction side of the REESS. Manufacturer may specify an appropriate location(s) and attachment point(s) to connect the breakout harness.

(b) Temperature probes are connected to the REESS outer casing to monitor changes in REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

(c) The external charge/discharge equipment, with maximum voltage and current set at least 10 percent higher than the REESS voltage and current limits, is connected to the breakout harness.

(d) The vehicle switch or device that provides power from the REESS to the electric power train is set to the activated position or the active driving possible mode.

(e) The REESS is discharged with the external charge/discharge equipment with the maximum discharge rate under normal operating conditions specified by the manufacturer. If the manufacturer does not specify an appropriate discharge rate, a power load of 1kW is used.

(f) Discharging is continued until the following occurs:

(1) The over-discharge protection control terminates the discharge current;

(2) The temperature gradient of the REESS is less than 4 °C through 2 hours from the start of discharge; or

(3) the vehicle is discharged to 25 percent of its nominal voltage level.

(g) After the discharge current is terminated, a standard cycle is performed in accordance with S12.6, if charge and discharge is permitted by the vehicle controls.

(h) After the completion of the standard cycle, or if the standard cycle was not performed, after discharging is terminated, the vehicle is observed for 1 hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS.

(i) At the conclusion of the test, electrical isolation of the REESS is determined in accordance with S7.2.

S12.3 *Overcurrent test.* The overcurrent test is only conducted on vehicles that have the capability of charging by DC external electricity supply. The test is conducted at ambient temperatures between 10 °C and 30 °C, with the vehicle REESS initially set between 40 to 50 percent SOC. The following steps are conducted to evaluate the vehicle's over-current protection controls:

(a) A breakout harness is connected to the traction side of the REESS. Manufacturer may specify an appropriate location(s) and attachment point(s) to connect the breakout harness.

(b) Temperature probes are connected to the REESS outer casing to monitor changes in REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

(c) The external charge/discharge equipment, with maximum voltage and current set at least 10 percent higher than the REESS voltage and current limits, is connected to the breakout harness.

(d) The vehicle switch or device that provides power to the vehicle controls that manage REESS operations is set to the activated position.

(e) The REESS is charged with the external charge/discharge equipment with the maximum charge current specified by the manufacturer. If the manufacturer does not specify an appropriate charge current, then a charge rate of ⅓C is used.

(f) After charging is initiated, the overcurrent specified by the manufacturer is supplied over the course of 5 seconds from the maximum charge current level to the over-current level. If the vehicle manufacturer does not supply an overcurrent level, a 10 Ampere over-current is supplied over 5 seconds. If charging is not terminated, the over-current supply is increased in steps of 10 Amperes.

(g) Charging at the over-current level is continued until the following occurs:

(1) The over-current protection control terminates the charge current; or

(2) The temperature gradient of the REESS is less than 4 °C through 2 hours from the first overcurrent input;

(h) After the charge current is terminated, if charge and discharge is permitted by the vehicle controls, a standard cycle is performed in accordance with S12.6.

(i) After the completion of the standard cycle or if the standard cycle was not performed, after charging is terminated, the vehicle is observed for 1 hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS.

(j) At the conclusion of the test, electrical isolation of the REESS is determined in accordance with S7.2.

S12.4 *Over-temperature test.* The overtemperature test is conducted at ambient temperatures between 10 °C and 30 °C on a chassis-dynamometer with the vehicle REESS initially set between 90 to 95 percent SOC. For a vehicle with on-board energy conversion systems such as an internal combustion engine or a fuel cell, the fuel supply is set to allow operation for about one hour of driving. The following steps are conducted to evaluate the vehicle's high temperature protection controls:

(a) The cooling system of the REESS is disabled using manufacturer supplied information. For an REESS that will not operate if the cooling system is disabled, the cooling operation is significantly reduced. If manufacturer does not supply information to disable or significantly reduce the cooling system, methods such as crimping the liquid cooling hose, removing refrigerant fluid, or blocking cabin air intakes for air cooled REESS are applied.

(b) Temperature probes are connected to the REESS outer casing to monitor changes in REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

(c) The vehicle is installed on a chassis dynamometer and the vehicle switch or device that provides power from the REESS to the electric power train is set to the activated position or the active driving possible mode.

(d) The vehicle is driven on the dynamometer using an appropriate vehicle manufacturer supplied drive profile and charging information for discharge and charge of the REESS to raise the REESS temperature to its upper boundary safe operating temperature within one hour. If an appropriate manufacturer supplied drive profile is not available, the vehicle is repeatedly accelerated to 80 mph and then decelerated to 15 mph within 40 seconds. If the manufacturer does not supply a charge profile, then a charge rate greater than ⅓C current is used.

(e) The discharge/charge procedure on the chassis-dynamometer is continued until the following occurs:

(1) The vehicle terminates the discharge/charge cycle;

(2) The temperature gradient of the REESS is less than 4 °C through 2 hours from the start of the discharge/charge cycle; or

(3) 3 hours have passed since the start of discharge/charge cycles.

(g) After the discharge and charge procedure is terminated, if charge and discharge is permitted by the vehicle controls, a standard cycle is performed in accordance with S12.6.

(h) After the completion of the standard cycle, or if the standard cycle is not performed, after the discharge and charge procedure is terminated, the vehicle is observed for 1 hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS.

(i) At the conclusion of the test, electrical isolation of the REESS is determined in accordance with S7.2.

S12.5 *External Short circuit test.* The short circuit test is conducted at ambient conditions with the vehicle REESS initially set between 90 to 95 percent SOC. The following steps are conducted to evaluate the vehicle's overcharge protection controls:

(a) A breakout harness is connected to the REESS. Manufacturer may specify an appropriate location(s) and attachment point(s) to connect the breakout harness.

(b) Temperature probes are connected to the REESS outer casing to monitor changes in REESS temperature. Temperature measurements may also be obtained through communication with the REESS control module.

(c) The vehicle switch or device that provides power to the vehicle controls that manage REESS operations is set to the activated position.

(d) The short circuit contactor (with the contactors in open position) is connected to the breakout harnesses. The total resistance of the equipment to create the external short circuit (short circuit contactor and breakout harnesses) is verified to be between 2 to 5 milliohms.

(e) The short circuit contactor is closed to initiate the short-circuit.

(f) The short circuit condition is continued until the following occurs:

(1) Short circuit current is terminated; or

(2) The temperature gradient of the REESS is less than 4 °C through 2 hours from the start of initiating the short circuit condition.

(g) After the short circuit current is terminated, if charge and discharge is permitted by the vehicle controls, a standard cycle is performed in accordance with S12.6.

(h) After the completion of the standard cycle, or if the standard cycle was not performed, after short circuit current is terminated, the vehicle is observed for 1 hour for evidence of electrolyte leakage, rupture, venting, fire, or explosion of the REESS.

(i) At the conclusion of the test, electrical isolation of the REESS is determined in accordance with S7.2.

S12.6 *Standard cycle.* The standard cycle is conducted at ambient temperatures between 10 °C and 30 °C and starts with a standard discharge followed by a standard charge. The discharge and charge procedures would follow manufacturer supplied information. The charge procedure is initiated 15 minutes after discharge is terminated.

(a) If the manufacturer does not provide a discharge procedure, the vehicle is discharged with 1C current until discharge is terminated by vehicle controls.

(b) If the manufacturer does not provide a charge procedure, the vehicle is charged with ⅓C current until terminated by vehicle controls.

S12.7 *Documentation for low temperature operation safety.* At NHTSA's request, each manufacturer shall submit documentation that includes the following:

(a) The make, model, model year, and production dates of the vehicles to which the submitted documentation applies.

(b) The lower temperature boundary for safe REESS operation in all vehicle operating modes.

(c) A description and explanation of charge and discharge rates at the lower temperature boundary for safe REESS operation.

(d) A description of the method used to detect REESS temperature.

(e) A system diagram with key components and subsystems involved in maintaining safe REESS charging and discharging operation for temperatures at or below the lower temperature boundary for safe REESS operation.

(f) A description of how the vehicle controls, ancillary equipment, and design features were validated and verified for maintaining safe REESS operations at or below the lower temperature boundary for safe REESS operation.

(g) Overall evaluation: A description of the final manufacturer review/audit process and results of any final review or audit evaluating the technical content and the completeness and verity of S12.7(a) to S12.7(f).

S12.8 *Documentation and visual warning in the event of operational failure of vehicle controls.*

(a) During the vehicle's active driving mode, the vehicle shall provide a visual warning to the driver when there is a vehicle control malfunction.

(b) At NHTSA's request, each manufacturer shall submit documentation that includes the following:

(1) The make, model, model year, and production dates of the vehicles to which the submitted documentation applies.

(2) A system diagram that identifies all the vehicle controls that manage REESS operation. The diagram must identify what components are used to generate a visual warning indicating malfunction of vehicle controls to conduct one or more basic operations.

(3) A written explanation describing the basic operation of the vehicle controls that manage REESS operation. The explanation must identify the components of the vehicle control system, provide description of their functions and capability to manage the REESS, and provide a logic diagram and description of conditions that would lead to triggering the telltale activation.

(4) Validation results from tests to confirm the display of a visual warning in the presence of a malfunction of the vehicle controls which manage safe operation of the REESS.

(5) Overall evaluation: A description of the final manufacturer review/audit process and results of the final review or audit which evaluated the technical content and the completeness and verity of S12.8(b)(1) to S12.8(b)(4).

S13. *REESS thermal propagation safety.*

S13.1 *Thermal runaway due to internal short in a single cell of the REESS.* The vehicle manufacturer shall make available to the agency, upon request, documentation demonstrating how the vehicle and its REESS are designed to mitigate the safety risks associated with thermal propagation resulting from a single cell thermal runaway due to an internal short within the cell. The documentation shall demonstrate thermal propagation safety risk mitigation for the vehicle in external charging mode, active driving possible mode, and parking mode. The documentation shall include the following:

(a) The make, model, model year, and production dates of the vehicles to which the submitted documentation applies.

(b) Part I: System analysis. This part of the documentation shall identify the conditions which could lead to single-cell thermal runaway due to an internal short-circuit in different vehicle operational modes and allocate applicable functional units, components, subsystems to each identified condition. This part shall include:

(1) A system diagram and a description of all relevant physical systems and components of the REESS, including information about the cell type and electrical configuration, cell chemistry, electrical capacity, voltage, current limits during charging and discharging, thermal limits of the components that are critical for thermal propagation safety.

(2) A system diagram, operational description of sensors, components, functional units relevant to single-cell thermal runaway due to internal short-circuit and thermal propagation, and the interrelationship between the identified sensors, components, and functional units;

(3) A description of conditions under which a single-cell thermal runaway and propagation event due to an internal short-circuit could occur;

(4) A description of how the identified conditions were allocated to each identified component, functional unit, and subsystem;

(5) A description of the process used to review the identified conditions and their allocation to the identified sensors, components, and functional units, for completeness and validity; and

(6) A description of the warning or notification system before the thermal runaway occurred, including a description of the detection technology and mitigation strategies, if any.

(c) Part II: Safety risk assessment and mitigation process. This part of the documentation shall identify thermal propagation safety risk mitigation strategies for identified conditions leading to single cell thermal runaway in Part I and include:

(1) A description of the safety risks and safety risk mitigation strategies, and how these were identified, and

(2) A description of how each risk mitigation strategy manages, mitigates, or prevents the identified safety risks.

(3) Safety risk mitigation strategies identified should include those that mitigate the risk of single cell thermal runaway due to an internal short and mitigate the occurrence of thermal propagation due to single-cell thermal runaway resulting from an internal short-circuit within the cell.

(d) Part III: Verification and validation of risk mitigation strategies. This part of the documentation pertains to verification that the manufacturer identified safety risks and considered safety risk mitigation strategies and include:

(1) A description of how each risk mitigation strategy was verified and validated for effectiveness,

(2) A description of the verification and validation results for each risk mitigation strategy, and

(3) A description of and results from the vehicle level assessment.

(e) Part IV: Overall evaluation of risk mitigation. This part of the documentation summarizes the vehicle design and manufacturing strategies and their validation to mitigate the safety risks associated with thermal propagation due single cell thermal runaway resulting from internal short within a cell. This part shall include a description of the final manufacturer review/audit process and results of the final review or audit evaluating the technical content and the completeness and verity of S13.1(a) to S13.1(d).

S13.2 *Warning in the case of thermal event in REESS.* The vehicle shall provide a warning to the driver of a thermal event in the REESS. The warning shall activate within three minutes of activating a heater within the REESS when tested in accordance with S13.3. The warning shall consist of auditory and visual signals that remain active for at least 5 minutes. The thermal event warning system must monitor its own readiness and the warning must be provided to the driver.

S13.3 *Test procedure for evaluating warning for thermal event in REESS.* The thermal event warning test is conducted at ambient temperatures between 10 °C and 30 °C with the vehicle REESS initially set between 90 to 95 percent SOC. The following steps are conducted to evaluate the warning in the case of thermal event in the REESS:

(a) If possible, the REESS is removed from the vehicle.

(b) The REESS casing is opened.

(c) A heater that achieves a peak temperature of 600 °C within 30 seconds is attached to one or more cells in the REESS in a manner to put at least one cell in the REESS into thermal runaway.

(d) The REESS casing is closed and the REESS is reinstalled into the vehicle (if initially removed in (a)).

(e) Vehicle stops to prevent vehicle rollaway are installed.

(f) The vehicle is placed in active driving possible mode.

(g) The heater within the REESS is activated to achieve 600 °C within 30 seconds. The heater shall remain operational until thermal runaway is initiated in at least one cell.

(h) The time for the activation of the warning to the front row occupant (if any) from the time of activation of the heater is noted.

(i) The test is terminated after activation of the warning or after four minutes of activating the heater in the REESS, whichever comes first.

S14. *Water exposure safety.* Each vehicle to which the standard applies shall maintain electrical isolation as specified in S6.3.1 and S6.3.2 at these times: (a) just after exposure to water in each of the two tests specified below and with the vehicle still wet; and (b) after a minimum of 24 hours after completing each of the tests specified below.

S14.1 *Vehicle washing test.* The vehicle is sprayed from any direction with a stream of freshwater from a standard test nozzle shown in Figure 9 that has a nozzle internal diameter of 6.3 millimeters, delivery rate of 11.9 to 13.2 liters/minute, and water pressure at the nozzle between 30 kPa to 35 kPa.

(a) During the washing, the distance from the nozzle to the vehicle surface is 3.0 to 3.2 meters. The distance of the nozzle from the vehicle surface may be reduced, if necessary, to ensure the surface is wet when spraying upwards. The washing test duration per square meter of the vehicle surface area is 60 to 75 seconds, with a minimum total test duration of 3 minutes.

(b) The vehicle external surface, including the vehicle sides, front, rear, top, and bottom is exposed to the water stream. Border lines on the vehicle such glass seals, outline of opening parts (doors, windows, vehicle inlet cover), outline of front grille, seals of vehicle lamps are exposed to the water stream from any direction.

(c) At the conclusion of the normal washing test, with the vehicle still wet, electrical isolation is determined in accordance with S7.2.

S14.2 *Driving through standing water test.* The vehicle is driven through a wade pool of at least 10 centimeters but not more than 15 centimeters depth of freshwater for a distance of 500 meters at a minimum speed of 12 mph (20 km/h) but not more than 15 mph (24 km/h).

(a) If the wade pool is less than 500 m in length, then the vehicle shall be driven through it several times for a total distance of 500 m. The total time, including the period outside of the wade pool, shall be less than 5 minutes.

(b) At the conclusion of the standing water test, with the vehicle still wet, electrical isolation is determined in accordance with S7.2.

S15. *Rescue Sheets and Emergency Response Guides.*

S15.1 *Rescue Sheets.* Prior to vehicle certification per 49 CFR part 567, vehicle manufacturers shall submit rescue sheets to NHTSA.

(a) For vehicles with a GVWR less than or equal to 4,536 kg to which the standard applies, submitted rescue sheets shall follow the layout and format in ISO–17840–1:2022(E).

(b) For vehicles with a GVWR greater than 4,536 kg to which the standard applies, the submitted rescue sheets shall follow the layout and format in ISO–17840–2:2019(E).

(c) The rescue sheets shall provide information for first responders to extricate occupants.

S15.2 *Emergency Response Guides.* Prior to vehicle certification per 49 CFR part 567, vehicle manufacturers shall submit to NHTSA Emergency Response Guides (ERGs) in accordance with the template layout and format in ISO–17840–3:2019(E) for vehicles to which this standard applies.

(a) The ERGs shall provide in-depth information linked and aligned to the corresponding rescue sheet to support the quick and safe action of first responders and second responders.

(b) The ERGs shall provide in-depth information related to electric vehicle fire, submersion, leakage of fluids, towing, transportation, and storage.

(c) The ERGs shall provide information to assist first responders in extricating occupants.

Figures to FMVSS No. 305a

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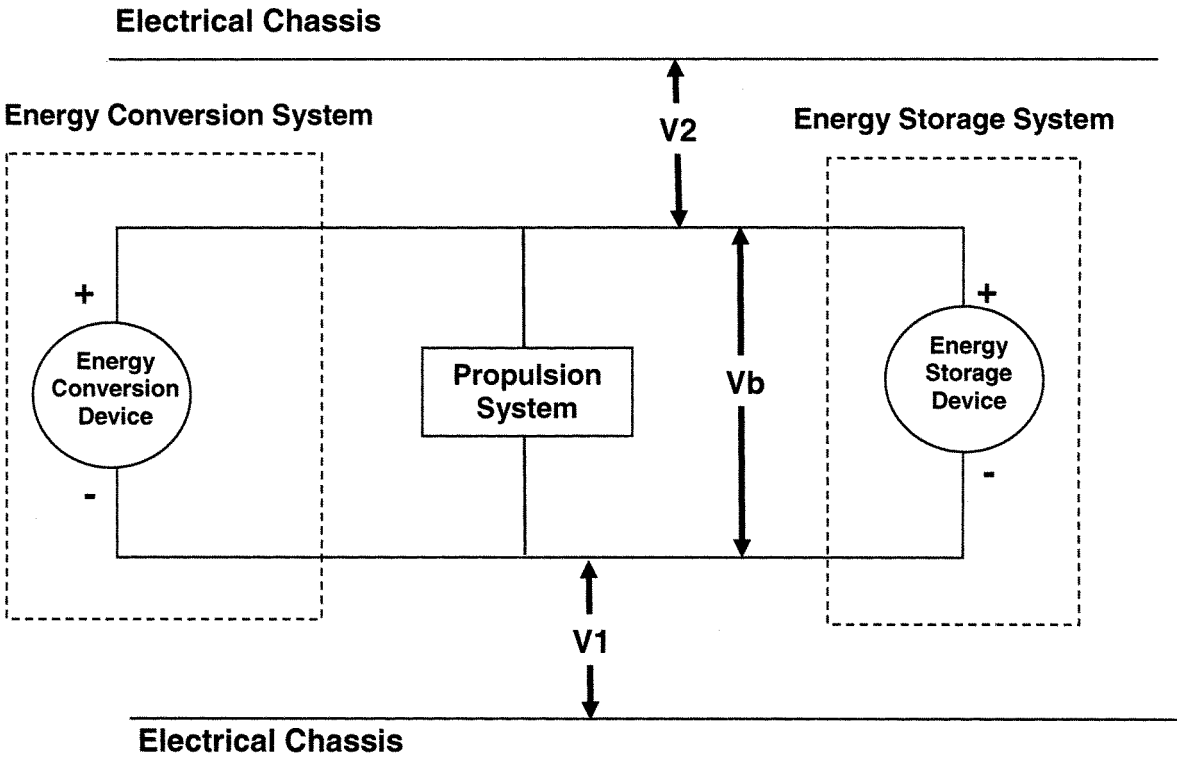


Figure 1. Voltage Measurements of the High Voltage Source

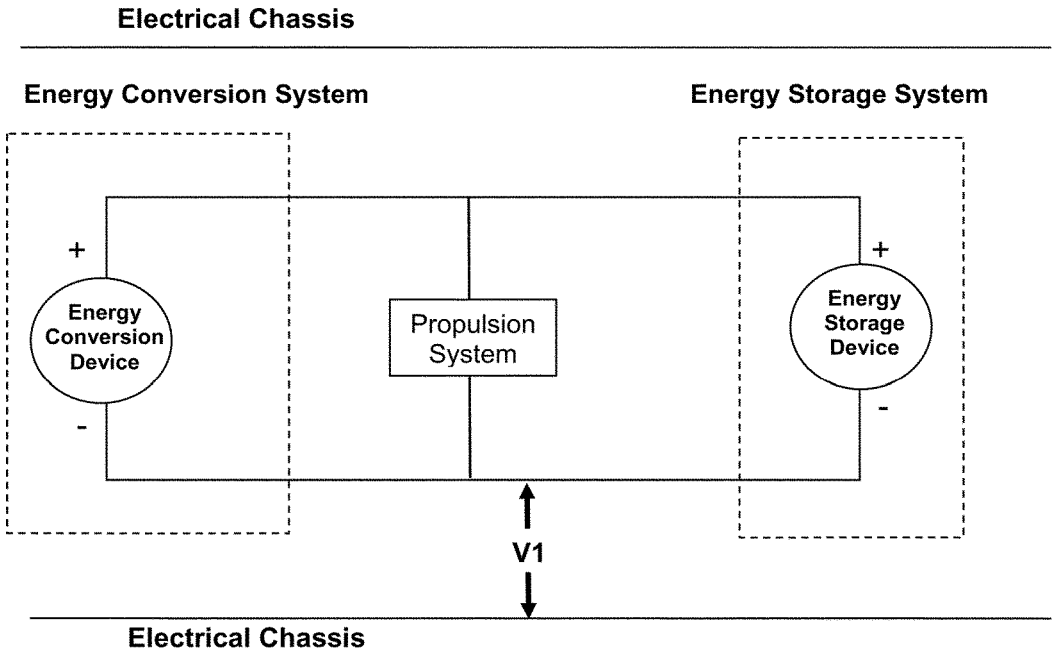


Figure 2. Measurement for V1 Voltage Between the Negative Side of the High Voltage Source and the Electrical Chassis

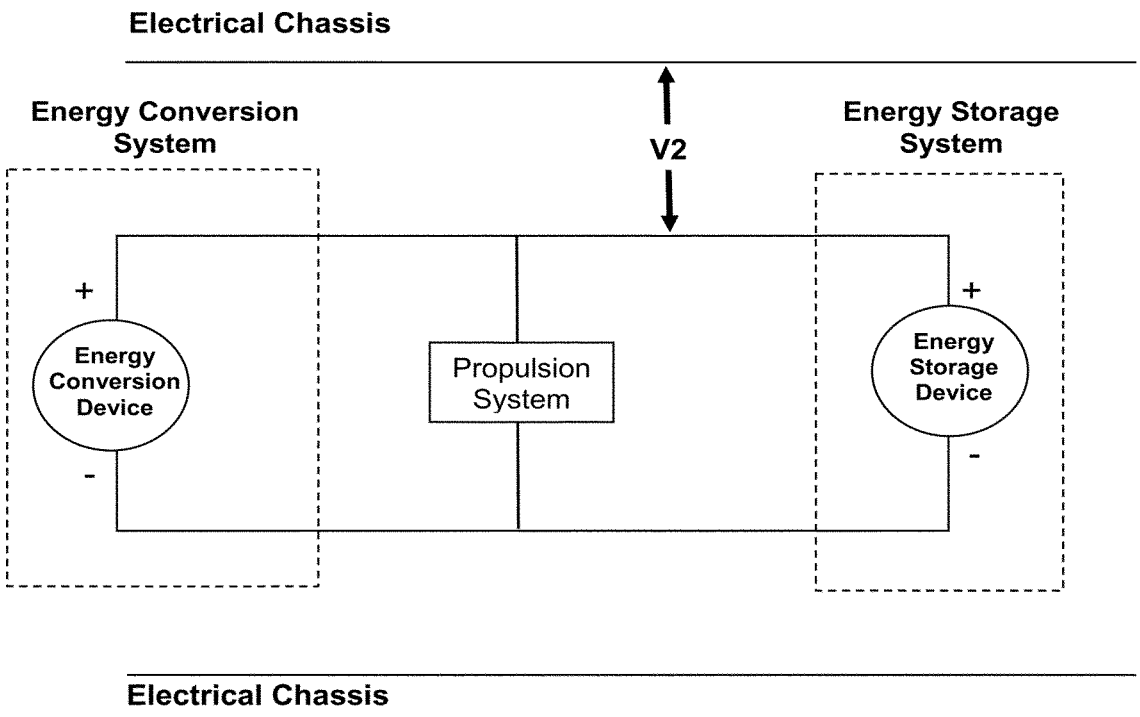


Figure 3. Measurement for V2 Voltage Between the Positive Side of the High Voltage Source and the Electrical Chassis

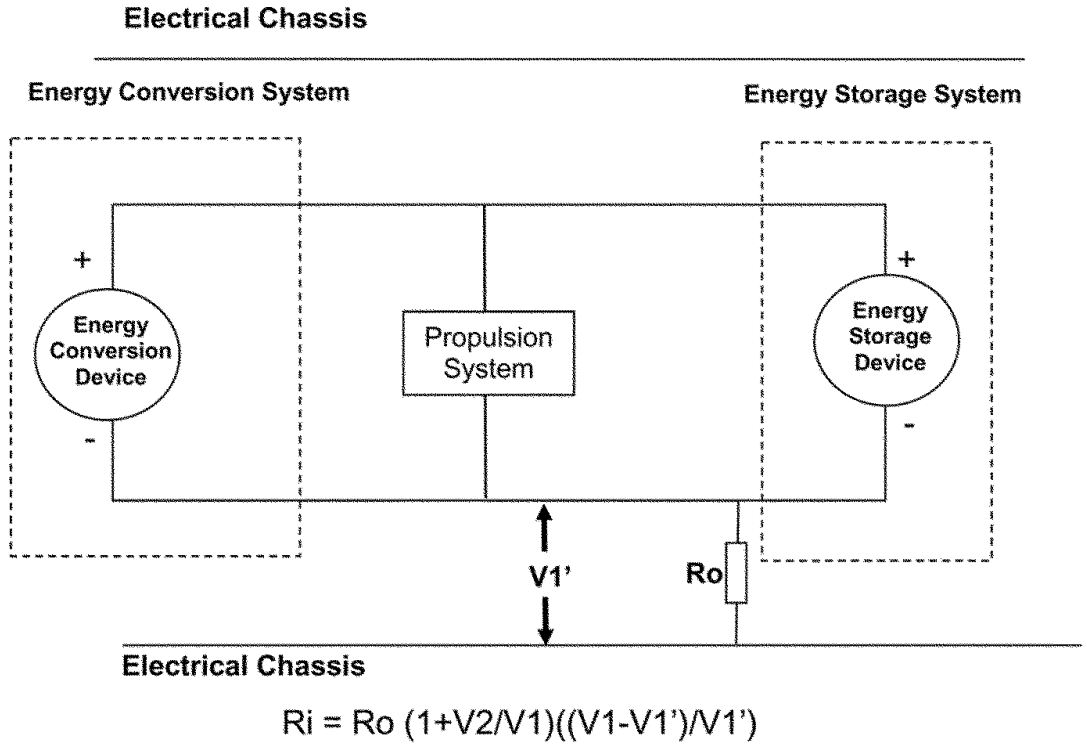


Figure 4. Measurement for V1′ Voltage Across Resistor Between Negative Side of the High Voltage Source and Electrical Chassis

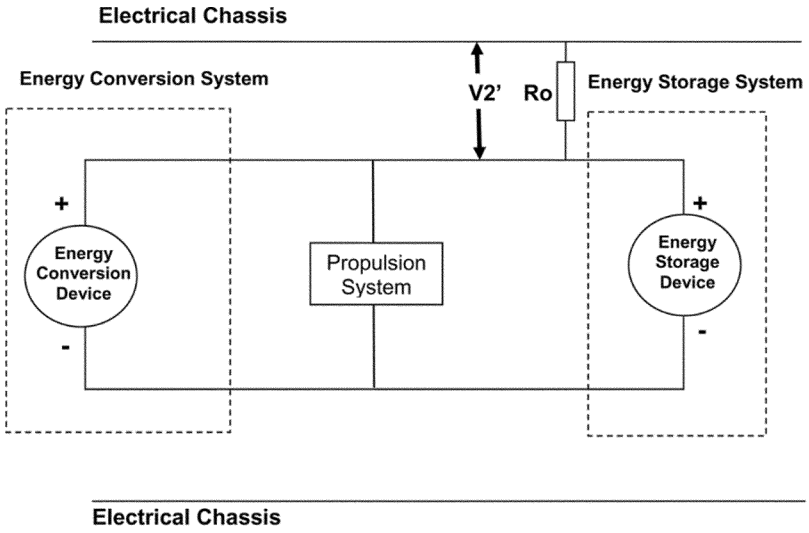


Figure 5. Measurement for V2′ Voltage Across Resistor Between Positive Side of the High Voltage Source and Electrical Chassis

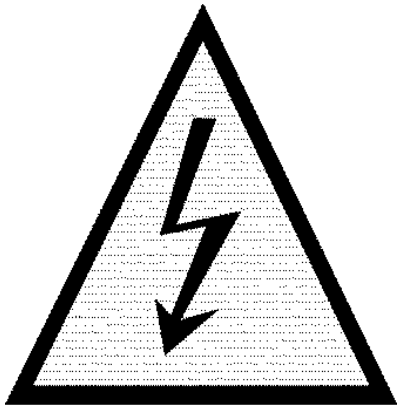


Figure 6. Marking of High Voltage Sources

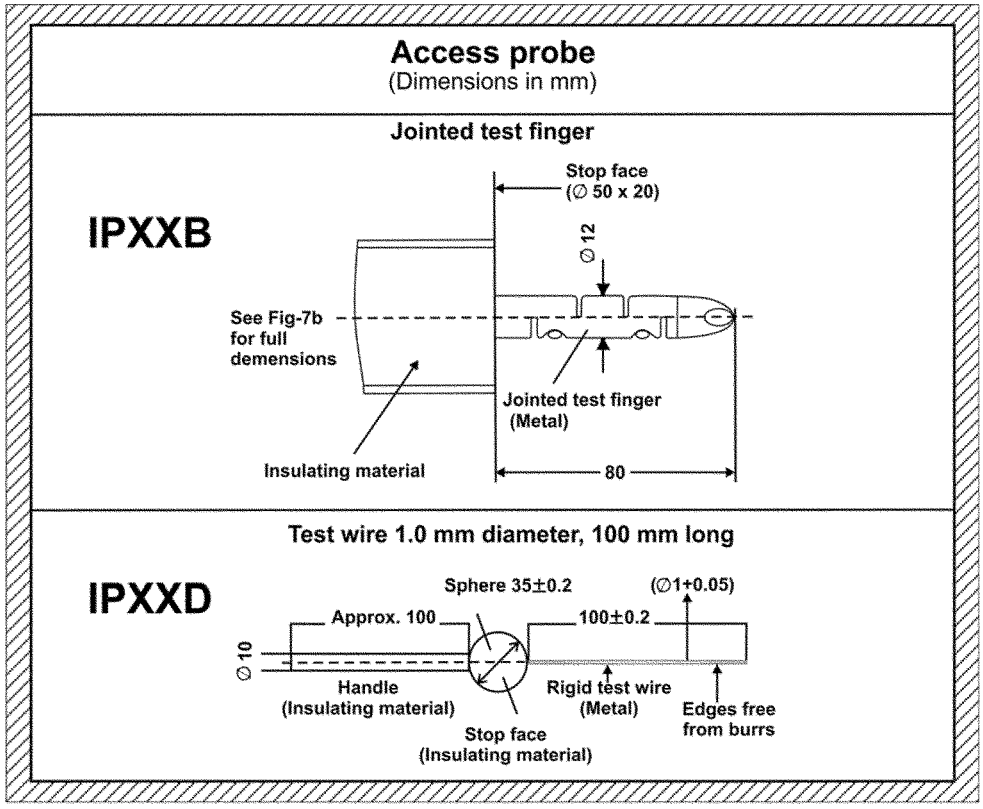
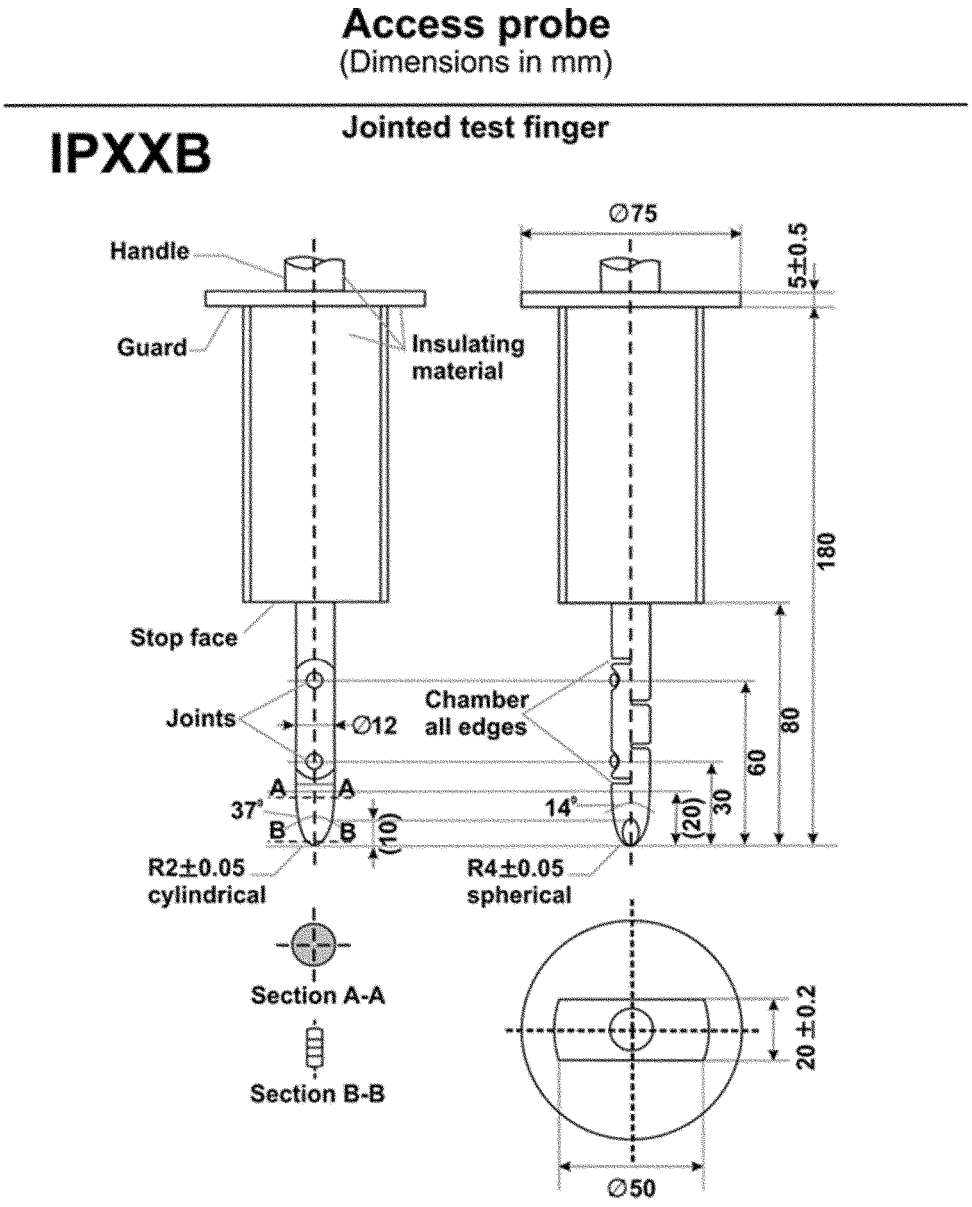


Figure 7a. Access Probes for the Tests of Direct Contact Protection. Access Probe IPXXB (Top) and Access Probe IPXXD (Bottom)



Material: metal, except where otherwise specified
Linear dimensions in millimeters
Tolerances on dimensions without specific tolerance:
on angles, 0/10 degrees
on linear dimensions:
up to 25 mm: 0/-0.05 mm
over 25 mm: ±0.2 mm
Both joints shall permit movement in the same plane and the same direction through an angle of 90° with a 0° to +10° tolerance.

Figure 7b. Jointed Test Finger IPXXB

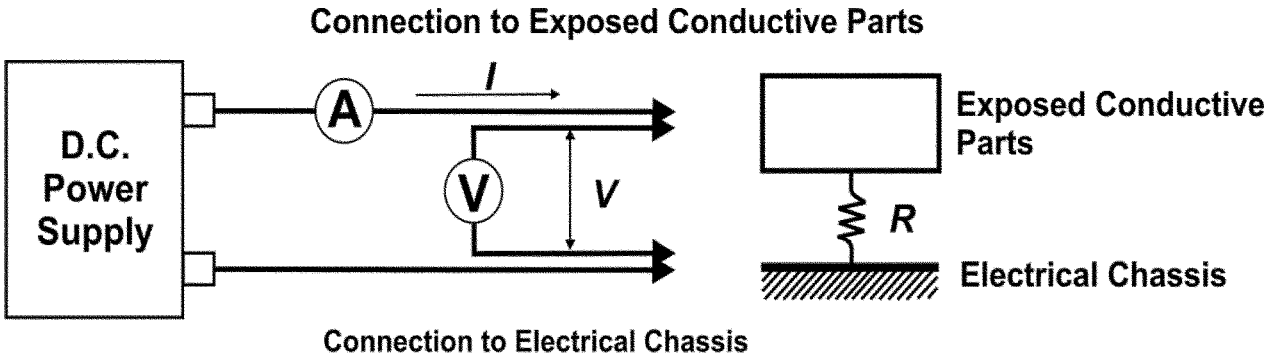


Figure 8. Connection To Determine Resistance Between Exposed Conductive Parts of Electrical Protection Barrier and Electrical Chassis

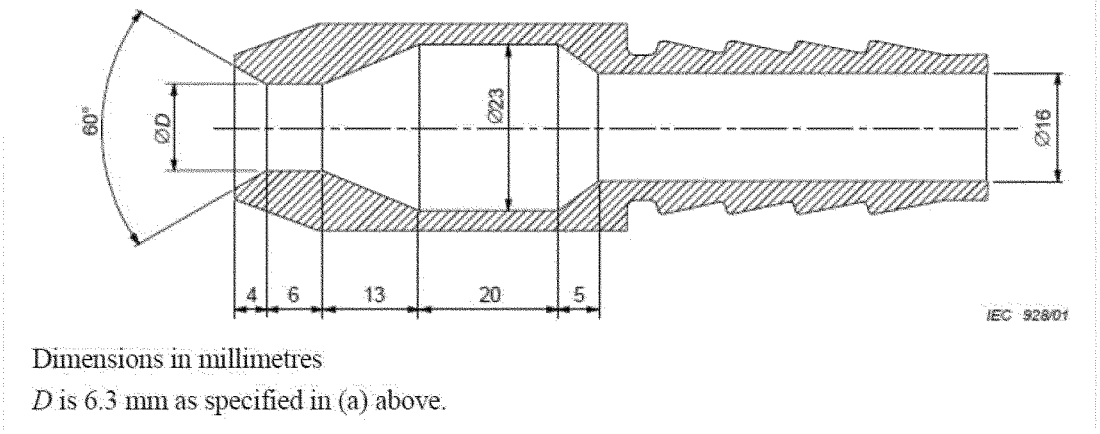


Figure 9. Standard Nozzle for IPX5 Water Exposure Test

Issued in Washington, DC, under authority delegated in 49 CFR 1.95 and 501.5.

Sophie Shulman,

Deputy Administrator.

[FR Doc. 2024–07646 Filed 4–12–24; 8:45 am]

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